

PRE-MALTHUSIAN DOCTRINES OF POPULATION:

A STUDY IN THE HISTORY OF ECONOMIC THEORY

BY

CHARLES EMIL STANGELAND, A. M.,
Sometime University Fellow in Economics

A DISSERTATION

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS

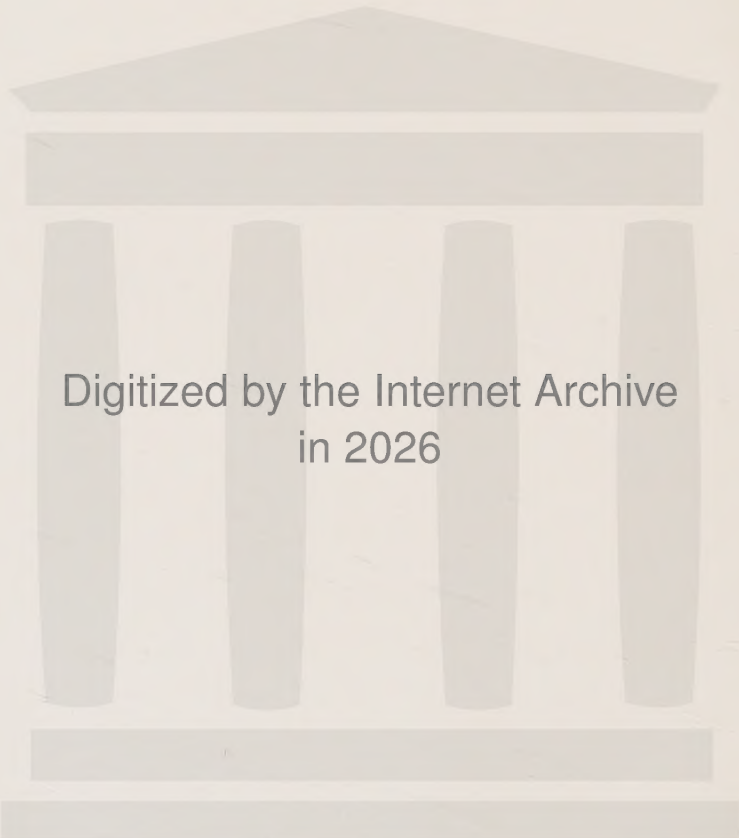
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN THE

FACULTY OF POLITICAL SCIENCE

COLUMBIA UNIVERSITY

New York
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PREFACE

THIS study does not purport to develop any original theory or doctrine. Its aim is to present in as clear a manner as possible the theories and doctrines advanced prior to the publication of Malthus's *Essay* in 1798. So far as possible, the theories treated have been expressed in the authors' own words; for the sake of clearness, however, it has often been necessary to resort to paraphrase. Where explanation and criticism have seemed necessary, these have been included in the body of the text.

The history of the theories of population has been treated more or less cursorily by certain German writers, such as Von Mohl, Roscher, Wappäus, Elster, and Jolles. Garnier wrote his excellent work, *Du Principe de Population*, about fifty years ago, and more recently Lucien Schöne and others have followed in his steps. In the works of Bonar there are valuable suggestions, and several English monographs have treated certain aspects of the subject. Apart from these studies—all somewhat fragmentary—there is no review of the literature bearing on population such as the historical importance of the subject seems to demand.

With regard to the general method pursued in this study, a few words of explanation may be in order. Although the author has much respect for the method which condenses opinions and generalizes upon them, he has not deemed it adequate to the present task. Garnier, for ex-

ample, gives a broad view of early ideas on the subject, but his work lacks completeness and definiteness. Von Mohl, on the other hand, endeavors to place before the reader the exact ideas of individual writers, necessarily in a very abbreviated form; and this is in general the plan which has here been followed. Such a method has inevitably involved a somewhat mechanical style and a certain redundancy in matter; but, on the whole, this has seemed to be the most satisfactory plan.

In the preparation of this study emphasis has been laid especially upon the economic aspects of the question; but in giving a history of the development of doctrines of population it is impossible wholly to ignore other sides of the matter. This idea is well expressed by Professor Wagner:¹ "Aber sie [the population question] greift auch über die wirthschaftlichen Fragen nach allen Richtungen hinaus; sie berührt ebenso auch physiologische, anthropologische, politische Probleme."²

That a considerable pamphlet literature, as well as works bearing only indirectly on population, has been omitted is not to be denied; but an investigation covering so vast a range would require a more detailed and extensive work than the present one aims to be.

The title, "Pre-Malthusian," may seem to be an arbitrary expression, and it is one of the objects of this study to indicate why it might be so regarded; but this accords, at any rate, with general impressions on the subject. There is at least as much justification for grouping together all theories of population prior to the Malthusian theory as there is for referring to the theories of value before Adam

¹ *Grundlagen*, p. 446.

² See also Rümelin, *Schönberg's Handbuch*, vol. i, pp. 827-8.

Smith or theories of rent since Ricardo. And says Jolles: ¹ "Chronologisch betrachtet wird jede Geschichte der Bevölkerungslehre in zwei Epochen zerfallen: in die vormalthusianische und die nachmalthusianische." Giuseppe Majorana, ² Heinrich Soetbeer ³ and others hold to the same view.

The author wishes the first two chapters to be regarded rather as an introduction to the succeeding chapters than as complete surveys of the fields treated in them. His studies have convinced him that there is room for much more extensive investigations in these fields.

In conclusion, he would gratefully acknowledge his indebtedness to Professors Seligman and Clark for detailed suggestions as to the matter; he is, moreover, greatly obliged to them for perusing the work while still in manuscript form, as well as for suggesting various improvements. He has also profited by consulting Professor Giddings concerning certain controverted points. From Professor Fowell, of the University of Minnesota, under whose tuition the work was originally undertaken, the author received much kindly aid and many valuable suggestions. He is also under deep obligations to Dr. A. S. Johnson for aid in preparing the manuscript for the press.

New York, 28 March, 1904.

¹ Conrad's *Jahrbücher*, 1886, p. 193. ² *Principio della Popolazione.*

³ *Die Stellung der Sozialisten zur Malthus'schen Lehre.*

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INTRODUCTION

It is generally conceded that the problems of population are among the most serious with which man has to deal. Says Francesco S. Nitti, in his suggestive *Population and the Social System* (p. 2) :

All the other questions of economic science, whether those regarding distribution, or those concerning the production of wealth, are secondary as compared with the problem of population, or, rather, are but aspects, as it were, of one vast prism. A brilliant Italian economist (Messedaglia : *L'Economia Politica in relazione colla Sociologia e quale scienza a sè*. Rome, 1891, p. 8) says that this is the most momentous and difficult economic problem, always of present importance ; it is the problem which, as Rossi well said, " concerns everything, morals and politics, national and domestic economy."

But Nitti adds : " Before Malthus, economic theorists had not studied the question of population at all, or had thought that the duty of sovereigns and states consisted in procuring an increase of population by every means in their power." This, however, is a mistake, as a perusal of even Nitti's own work will show ; and the present study will prove that Nitti's statement is merely an expression of a general impression, which stands in need of revision.

Wagner and Rümelin are inclined to regard population as something more than a mere branch of economics, and as an independent science coördinate with political economy.

Though the study of population problems is often spoken

of as peculiar to modern thought, we find, as a matter of historical fact, that it has occupied the attention of thoughtful men in nearly all ages. To its influence, often unavowed, sometimes not even clearly recognized, we can trace a great part of the rules, customs and ceremonies of early peoples. Where war is common we find, as a rule, that custom and law are favorable to increase in numbers; and this we may ascribe to the consciousness that with numbers usually goes strength, and with superior strength in battle go the spoils of war. But when war ceases to be the normal state of man, and when tribes or nations renounce the policy of mutually endeavoring to ruin each other and begin to seek the means of subsistence in production and exchange, the doctrine that a large population is always the *summum bonum* of the state ceases to be regarded as true. It is gradually recognized that there is no necessary harmony between the "principle of population" and the resources offered by the environment. The consequent alternative is presented of solving the problem either through the destructive action of the forces of nature or the regulative influence of human reason.

Even in the earliest times the importance of movements in population was recognized, and social customs were developed which subordinated the animal impulses to the needs of the social unit. But theoretical investigations of population became possible only after the life of the state or society in general was subjected to a scientific treatment; and a definite and rational population policy became possible only when a state awoke to the consciousness of itself as an organic entity superior to the aggregation of individuals of whom it was composed.

The study of population doctrines, theories or principles involves the history of morals and marriage, the ideals and

purpose of the state, religious and philosophic systems. The history of population is intimately connected with the social, economic, political and religious history of man. Society exercises pressure on the individual by religious, moral and legal sanctions, sometimes quickening and sometimes retarding the growth of population.¹ Because population is a question involving so many phases of human life and ideals, and may thus be viewed from non-economic as well as from economic standpoints, the writer believes that much light may be thrown upon it by such works as Westermarck's *History of Human Marriage*, Lecky's *History of European Morals*, and Lea's work on *Celibacy*.

The doctrines of population prevailing at different periods may be shown to be closely related to prevalent conditions. Professor Wagner admirably expresses this in the following words:

Man wird dabei aber doch in der Regel den Einfluss der concreten Verhältnisse des Bevölkerungswesens, der geringen oder grossen Volkszunahme, Volksdichtigkeit, der Zeit- und Landesverhältnisse, auch der wirthschaftlichen, politischen (Wehrkraft!), welche das Eine oder Andre wünschenswerth oder bedenklich erscheinen lassen, ferner auch den Einfluss der jeweiligen Verwaltungspolitik in Bezug auf die Bevölkerung (Ein-, Auswanderungsrecht, Zugrecht, Eheschliessungsrecht, begünstigende oder hemmende legislative und administrative Maassregeln) auch auf die Ansichten der Theoretiker nicht verkennen können.²

Malthus had but a meagre acquaintance with preceding writings on population. In the preface to the third edition of the *Essay* he distinctly acknowledges his indebtedness

¹ Cf. Marshall's *Principles of Economics*, vol. i, bk. iv, ch. iv.

² *Grundlagen*, p. 454.

in formulating his "principle" to Hume, Wallace, Adam Smith, and Price; and in another passage he remarks:

In the course of this inquiry, I found that much more had been done than I had been aware of when I first published the *Essay*. The poverty and misery arising from a too rapid increase of population had been distinctly seen and the most violent remedies proposed so long ago as the times of Plato and Aristotle. And of late years the subject has been treated in such a manner by some of the French economists, occasionally by Montesquieu, Sir James Stewart, Mr. Arthur Young and Mr. Townsend, as to create a natural surprise that it had not excited more public attention.

Nitti's statement (p. 4) that the phenomena which suggested to Malthus "his terrible law" occurred only with the birth of modern industry is true only in a limited sense, as this essay will prove.

The doctrines of population that were advanced before the nineteenth century may be grouped according to the characteristics of the general body of thought of which they are part. If arranged chronologically they appear in about the following order:

I. The primitive attitude, usually taking the form of religious veneration of the procreative powers.

II. The Greek view, which held the sexual relation in strict subordination to the ends of the city-state.

III. The Roman population policy, which constantly endeavored to stimulate the increase in population, with a view to the indefinite expansion of the Roman state.

IV. The mediæval Christian conception of sexual relations, which emphasized the moral superiority of celibacy.

V. The attitude of the humanists, emphasizing the need of regulation of population, in imitation of classical views.

VI. The individualistic and anti-ascetic attitude of the Reformation.

VII. The mercantilist attitude, favoring increase of population as a prerequisite to national power.

VIII. The scientific attitude toward population, based upon study of the relation between population and the food supply.

In modern times two leading tendencies, which may be regarded as broadly typical, are exemplified by the optimistic fatalism of Luther on the one hand, and by the rational pessimism of Malthus on the other. It would not be correct, in the opinion of the writer, to speak of pure Malthusianism as having existed much before the time of Malthus. Restriction of population was, indeed, often advocated and practiced; but not until the most recent centuries was this done on approximately the same grounds as those on which Malthus based his doctrine. Doctrines of population must be interpreted in the light of the times in which they are enunciated.

CHAPTER I

CLASSICAL DOCTRINES

I. *The attitude of the Greeks as shown in their political institutions and in their laws, philosophy and literature.*

§ 1. *The Individual and the State.* The theories of population of the ancients and the policies based thereon are most easily understood with reference to their ideals of the state. These ideals found their purest expression among the Greeks. In Greek life the individual found his *raison d'être* and the satisfaction of his truest nature only in the most intimate connection with the social organization and in obedient subordination to it. Man was regarded as essentially a "political animal," and not in any sense as an isolated, independent unit. The individual was simply a part of the state. The state took upon itself the guidance and regulation of its citizens even in the minor details of life.¹ The regulation of marriage and procreation was a matter always considered of prime importance.²

§ 2. *Ideals and Practices.* In ancient Sparta in particular we find a pronounced example of political communism. Here we notice especially the absence of family life. Marriage was emphatically made a means by which the

¹ Cf. Aug. Souchon, *Les Théories Économiques dans la Grèce Antique*, p. 44.

² Zumpt, *Ueber den Stand der Bevölkerung und die Volksvermehrung im Alterthum*, p. 3 et seq.

individual should serve the ends of the state. Although marriage was naturally sanctioned by religion, it was not a religious institution, nor was it an institution intended primarily for the satisfaction of natural and personal desire. It was clearly an institution of law and politics, intended to furnish the state with inhabitants, citizens, without whom the state could not exist.¹

The view that the real purpose of marriage is the procreation of children is perhaps more apparent in Spartan policy than elsewhere. Wars frequently decimated the population, and it therefore became of vital importance to the community to obtain a new supply of men, of young citizens. The Spartans especially, but also the Cretans and others, endeavored to attain this end by severe regulative means. Every Spartan was compelled to marry. Celibacy was punished by public sentiment and by written law. Bachelors suffered many legal and political disabilities.² The youth were not required to pay to old bachelors the respect which custom otherwise paid to old age, and minor indignities were suffered by those who were persistent in their celibacy. The state did not merely make marriage practically compulsory. Pollux speaks not only of a *γραφὴ ἀγαμίον* and a *δίκη ἀγαμίον*, but also of a *δίκη ὀψιγαμίον* and *κακογαμίον*.³ The laws would not permit the continued postponement of marriage, nor would they permit marriage according to individual inclinations, unless, of course, these agreed with state regulations. The prime requisite was that a marriage should be good in the sense of the expressed

¹ Cf. Robert Pöhlmann, *Die Uebervölkerung der antiken Grossstädte*, pp. 7-8, 152, 153; also Malthus, *Essay*, bk. i, chs. xiii, xiv.

² Plutarch, *Lycurgus*, 15.

³ Bk. iii, 48; cf. Filangieri, *Leggi Politiche ed Economiche*, p. 24.

purpose of the law; that is, it should be one likely to produce children of sound mind and body.

Greek marriages do not seem to have been very fruitful, and in Sparta fathers who had three or four sons were publicly rewarded.¹ According to Plutarch, the fruitfulness of marriage was sought even at the sacrifice of legitimacy of offspring.²

With the development of navigation, the Greeks established colonies which furnished asylums for excessive numbers. We do not find any great fear of over-population in Sparta, except so far as concerned the increase of the elots or slave population. Infanticide and abortion were, however, frequently resorted to, and the exposure of newly-born children who were deformed is, of course, too well known to need discussion here.⁴

At Corinth, Pheidon limited the population in an absolute manner, though in this, as in other similar instances, only when the population, undisturbed by wars, had increased substantially. The Cretans considered it a necessity to hold population in check by law.⁵

Spartan ideals of population are well summed up by Xenophon.⁶ He mentions with approval the fact that Lycurgus permitted and approved the exposing of infants who were unfortunate in their birth and were deformed, in order to make the population stronger physically and mentally and to avoid overburdening and impoverishing par-

¹ Aristotle, *Politics*, bk. ii, 9. ² *Op. cit.*

³ Cf. Bertheau, *Essai sur les Lois de la Population*, pp. 213-5. See Morley's *Ideal Commonwealths*, p. 29.

⁴ *Ibid.*, pp. 30-31.

⁵ Bertheau, p. 218.

⁶ *Lacedemonian Republic*, bk. i. Morley, in the preface to his edition of *Ideal Commonwealths*, speaks of Lycurgus as "the half mythical or all mythical Solon of Sparta."

ents, and consequently the state, with useless or superfluous offspring. He "reckoned the matter of procreation of children of the greatest consequence to free women;" he enjoined, moreover, that marriage should be consummated when the body was in full strength, as he considered this conducive to the rearing of robust and manly offspring.

The case was somewhat different in Athens. There was more room for personal initiative and the development of individuality. There was no such rigid regulation of the acts of citizens as in Sparta, and marriage was certainly less public in nature and in purpose than among the Lacedemonians. But there were laws against celibacy in Athens also,¹ and there were similar, though less stringent, customs and laws to promote the fruitfulness of marriage.² The political regulation of marriage and its relation to population varied in nature as well as in the strictness of enforcement. In times of peaceful development, in which population naturally increased rapidly, such regulation became less important. When population increased too rapidly the ordinary recourse was to colonization. To avoid the evils of over-population the highest wisdom of the Greeks suggested, besides, late marriages. And in Athens as in Sparta, and generally among the ancients, exposure and abortion were resorted to, though these practices were probably often not due to the simple desire of limiting the population.³

Malthus conjectures, partly on the basis of analogous conditions prevailing elsewhere, that the practice of infanticide or exposure had prevailed in Greece from the earliest

¹ Pollux, viii, 40.

² Plutarch, *Solon*, 20.

³ Bonar, *Malthus and his Work*, p. 114.

ages.¹ It seems probable that a later statement of his is correct: "When Solon permitted the exposing of children, it is probable that he only gave the sanction of the law to a custom already prevalent." It is possible, as Malthus also says, that Solon's idea here was based on a theory similar to that advanced by Malthus. The custom may owe its origin largely to the desire of preventing excessive numbers, with resulting popular suffering and discontent; and since, in the case of Greece, the territory seemed definitely limited, to keep the population as nearly as might be in accord with the means of subsistence.

§ 3. *Plato*. It has often been remarked that every political philosopher necessarily bases his system upon the body of thought which is the peculiar product of his age. The genius of a great thinker may create a system which is far superior to current ideals; yet he does not escape the influence of his mental environment. In the abstract theories of ancient philosophers respecting the functions of the state in regard to marriage and population we recognize much that is a reflection of the social life of the time.² This is, to a certain extent, exemplified in the views of both Plato and Aristotle.

In his Utopian state Plato endeavored to picture civic harmony in its perfection. All personal ends were to be subordinated to the common good.³ The upper classes should sacrifice property and family to the interests of the

¹ Malthus, *Essay*, Third Edition, p. 275; cf. Montesquieu, *Esprit des Lois*, bk. xxiii, ch. xvii.

² Cf. Karl Hildebrand, *Geschichte und System der Rechts- und Staatsphilosophie*, vol. i, p. 11; Gustav Billeter, "Einige Bemerkungen," etc., in *Zeitschrift für Social- und Wirthschaftsgeschichte*, vol. vi; Plato, *Crito*, 12, 13.

³ Jowett's Plato, *Republic*, Bk. v.

whole society, the state. In Plato's ideal commonwealth marriage was to be not a matter of personal preference and desire, but simply a means of propagating the race.

Only those who were in the best age were to be permitted to rear children—the women from the ages of twenty to forty, the men from the ages of twenty-five to fifty-five. Plato argued that the same principles of selection which have done so much to improve the stock of domestic animals should be applied to the improvement of the race of men.¹ The government should decide what persons might pair with one another, and it should so regulate pairings that the state would be neither too populous nor too thinly peopled. A passage in the *Laws* suggests a method whereby natural inclinations might be enlisted to aid in the proper selection of mates, with a view to physical improvement of the race.²

All children were to be examined for physical defects, and only those of healthy and vigorous constitution were to be reared; the weak and crippled were to be exposed "in some mysterious, unknown place, as they should be."³ This should also be the fate of any offspring resulting from illegal unions and from such unions as had occurred at unsuitable age periods.

In the *Laws*, Plato abandons in a measure the population policy advocated in the *Republic*, substituting a system more in accordance with the practical needs of the time and the possibilities of Greek life. Community of women and children, possessions and property, is here also represented as desirable, but as attainable only by "gods

¹ *Op. cit.*, vol. iii, p. 154.

² *Laws*, vi; cf. Plutarch's *Lycurgus* (Morley), pp. 26-27.

³ *Republic*, bk. v, 7.

and sons of gods." A state which is, in Plato's view, not the best, but as nearly ideal as circumstances allow, must satisfy itself with equality in definite orders or classes.¹ This city-state should consist of 5,040 citizens, and land, houses and property in general should be equally divided among them. Each citizen should be obliged to keep his property intact, neither diminishing nor increasing it, and it should be transmitted unchanged to his heir.² He should bequeath his property to that son whom he had held most dear; the remaining sons were to be provided for either by voluntary arrangements or by the state, or they were to go into families having no children. The women should be married between the ages of sixteen and twenty, and the men between the ages of thirty and thirty-five. Marriage within these periods should be compulsory.³

It should be one of the chief duties of the state to watch critically all movements of the population. The state should indicate to the citizens what they were to do and should observe closely whether there were too many or too few children born, and, so far as possible, should find means whereby the number of citizens might remain continually 5,040. Plato regarded this as quite feasible. There were private means of checking increase (infanticide, exposure, abortion, *etc.*) in unions of too great fecundity, and also of stimulating fruitfulness when occasion demanded. In case numbers should become excessive, however, Plato advised recourse to colonization. And if population should seriously dwindle, immigration would be a remedy.⁴ In order to forestall any such necessities newly-married couples should be watched and expected to rear

¹*Laws*, vi (Jowett, v, p. 153).

²*Laws* v, 740.

³*Laws*, iv, 721; vi, 785.

⁴*Laws*, v, 741.

children. If after ten years a marriage should prove unfruitful, a separation should take place.

Plato's discussion, so far as his doctrines of population are concerned, is obviously based not upon any broad view of human society, but upon his ideal of a city-state. It is, therefore, too much to say, as does Malthus,¹ that "Plato fully saw the tendency of population to increase beyond the means of subsistence." In constructing his ideal state, Plato realized that with the practical communism involved in that state and the consequent removal of individual responsibility for offspring, control of population by the state would be the only adequate means of avoiding the disasters of excessive numbers. Accordingly it is obvious that Plato's theory was not identical with that of Malthus: the former based his ideas on a theoretical, communistic city-state; the latter derived his theories from the actual conditions of the modern national state.

§ 4. *Aristotle*. In contrast with Plato's view that the sole purpose of marriage is the rearing of offspring, Aristotle expressly emphasized the moral value of the institution.² Men and women marry not simply for the purpose of bringing children into the world, but in order to spend their lives with one another, sharing, in a measure, all joys and sorrows. But Aristotle was at least as emphatic as Plato in declaring that the law-maker should regulate conjugal life by making certain rules to guide citizens in their marital relations. Property and population should be so regulated that the proportion of property which each citizen held would be sufficient to support him and his family; and as the amount of property was limited, the number of children should be regulated with even greater strictness

¹ *Essay*, Third Edition, p. 279.

² *Ethica Nikaia*, viii.

than Plato suggested.¹ It should be ordained when and with whom marriage should be permitted.² The age was to be so determined that too great discrepancies might not exist between husbands and wives, in order that the sexual powers of married couples might correspond. That this end might be best attained, a husband should be his wife's senior by about twenty years, and no unions should be permitted women before their seventeenth or men before their thirty-seventh year. The lawgiver should take measures to prevent elderly couples from bringing offspring into the world, since such offspring are, as a rule, physically and mentally deficient.

Aristotle also advised exposure of all deformed children. Furthermore, in case a woman who already had such a number of children as the law allowed, became pregnant, he regarded abortion as a necessary recourse. This might, however, be avoided if the paternal property, when divided among the heirs, would be large enough to furnish all with adequate support.³

As in the theories of Plato, we note that Aristotle's theories of population are based upon the city-state, to which all individual interests and desires are strictly subordinated.

§ 5. *References to Population in Non-philosophic Writings.* In Hesiod's *Theogony* we find the opinion expressed that if woman and marriage are not essentially evils to be endured, they represent nevertheless good largely tempered with evil.⁴ The prevailing view, however, seems rather to have been that expressed by Sophocles in the *Antigone*.⁵

¹ *Politics*, ii, 5, 6, 7, 9.

² *Ibid.*, vii, 16.

³ *Ibid.*, vii, 16.

⁴ *Vv.*, 600-612.

⁵ *Vv.*, 875 *et seq.*

To live and die childless was one of the most humiliating misfortunes the destinies could inflict.

Oh, the guilty bed
Of those from whom I sprang! Unhappy offspring,
I go, accurs'd, a virgin and a slave . . .
Ne'er shall I taste of Hymen's joys, or know
A mother's pleasure in her infant race;
But friendless and forlorn, alive descend
Into the dreary mansions of the dead.¹

Among other writers we find traces of the pessimistic view of marriage. This is apparent in Aristophanes, especially in the *Thesmophoriazusae*. The frequently cited misogynism of Euripides well exemplifies this view. The fact that the most celebrated Greek philosophers lived in celibacy, especially after the time of Socrates, is significant.²

Herodotus, on the other hand, writes approvingly of the practice of the Persian kings of rewarding fecundity by an annual distribution of rewards to those subjects who had large numbers of children.³ Thucydides remarks upon the disadvantages of large masses of population centred in cities, particularly upon the tumults and changes to which they are liable. Among later writers Strabo speaks of the necessity of rearing children to take the place of those who have fallen in wars; and he describes also the desire for offspring which was felt by both sexes, in Lacedemonia, a desire which he shows was based on both private and public grounds.⁴ Plutarch's favorable references to the alleged laws and customs of the early Greeks, in his lives of Ly-

¹ See Franklin's *Sophocles*; cf. v. 928, *Electra*; cf. also *Genesis*, xxx, 23.

² Cf. also the story of Thales in Plutarch's *Solon*.

³ *History*, i, 199; iv.

⁴ Bk. vi.

curgus and Solon, have already been mentioned. Justin¹ takes a stand similar to that of Strabo. He says that the Lacedemonians sometimes went to what would be considered immoral extremes, *in multitudine*, in their desire to keep up the population, which continued wars threatened seriously to diminish and weaken.

§ 6. *The Later Schools of Philosophy.* Epicurus, according to some ancient writings, seems to have regarded family life as largely superfluous.² Though this is undoubtedly an exaggeration, it is true that his system of philosophy advised the wise, as a rule, to refrain from marriage and the rearing of children. It appears that he regarded parental love as not natural or inherited. Parents were not, however, to endeavor consciously to withhold parental love. Love for offspring was regarded merely as a hindrance to the philosopher's highest thought, an idea which in modified form was later developed by Catholicism.³

The Stoic doctrine regarded marriage with favor, and taught that the rearing of offspring was one of the duties of man. The sincerity of the Stoic advocacy of marriage is somewhat questionable, since it does not appear that the practice of the Stoic teachers corresponded at all with their theories.⁴ The Cynics of the later Empire recommended a complete renunciation of civic and domestic ties and a life spent wholly "in the contemplation of wisdom." The Egyptian philosophy which soon afterward appeared in Greece anticipated still more closely the monastic ideal.⁵

¹ Bk. iii, ch. 4.

² Cf. Epictetus, *Epicurus*, i, 23.

³ Eduard Zeller, *Philosophie der Griechen*, vol. iv, Erster Abschnitt.

⁴ Suc. Demonax, 55. Cf. Herford, *The Stoics as Teachers*, p. 53.

⁵ Lecky, *op. cit.*, i, p. 328; ii, 109.

II. *The Attitude of the Romans toward Population*

§ 1. *Imperialism and Population.* The Roman ideal of the state involved conquest, power and empire. The Greek idea of perfection might be realized through artistic and intellectual development within the confines of a small and self-limited state; the Roman ideal included universal domain. These differences in political ideals explain to a very large extent the differences in the Greek and Roman views of the problem of population. The Romans needed increasing population; new soldiers were always required to fill the ranks depleted in the wars of conquest. Hence we find that, like the Greeks, the Romans attempted to regulate marriage by law, but it was always the aim of the Roman legislator to stimulate increase of population, never to limit it.

Marriage was declared to exist fundamentally and primarily for the sake of rearing offspring—*liberum quæ-sundum gratia*.¹ The rearing of legitimate offspring was regarded as the duty of all citizens.² But in spite of this general view of marriage and its purpose, the marriages of the upper classes, at any rate, do not seem to have been very fruitful, as we infer from the often rapid extinction of many patrician families.³

Even in the early days of the Republic the censors endeavored to encourage marriage, with a view to increasing the number of people. Sometimes rewards or immunities

¹ Cf. Moritz Voigt, *Das Civil- und Criminalrecht der XII Tafeln*, vol. ii, pp. 679-80. See Voigt, *Lex Maenia*, 131. Mommsen, *Röm. Gesch.*, vol. i, ch. v: "Eigenes Haus und Kindersegen erscheinen dem römischen Bürger als das Ziel und der Kern des Lebens;" also *Staatsrecht*, vol. ii, p. 379.

² Voigt, *ibid.*, p. 245, note.

³ Niebuhr, *Röm. Gesch.*, vol. i, pp. 417 *et seq.* and vol. ii, p. 312.

were granted to those who accepted the obligations of matrimony and parenthood; at other times penalties, as, for example, a special tax (*aes uxorum*) was imposed on persistent bachelors. After 164 B. C. the population of Rome seems to have been either stationary or somewhat declining, and the unfavorable census returns caused much regret. The censor, Quintus Metellus, urged that laws be passed compelling citizens to marry.¹ "If, Romans," he is said to have argued, "we had the power of living without wives, we should all be free from that trouble; but nature has so disposed it that we can neither live very commodiously with them, nor without them exist at all, and we must then provide rather for perpetual security than for transient pleasure." The attitude of Metellus is the more remarkable since he was reputed to be a happy *paterfamilias*; but it is probably characteristic of the prevalent Roman views.²

Valerius Maximus says that the censors Camillus and Posthumius levied a fine on citizens who grew old in single life,³ and Plutarch, in the life of Camillus, relates that "as the wars had made many widows, he obliged such of the men as lived single, partly by persuasion and partly by threatening them with fines, to marry the widows."

§ 2. *The Laws of Julius and Augustus Caesar; the Lex Julia et Papia-Poppæa.* The moral state of the populace in the early Empire was admittedly a very low one; of this the writings of the times give us quite full evidence. Marriage was but lightly regarded, and virtue and marital fidelity were often rather matters of tradition than of fact.

¹ Livy, *Epitome*, lix: "censuit, ut cogerentur omnes ducere uxores liberorum creandorum causa." Cf. Aulus Gellius, *Noctes Atticae*, i, 6, 2.

² Cicero, *Tuscularum Disputationum*, i, 35, 85.

³ Val. Max., ii, 9, 1.

Luxury and ambition, vice and power, exercised a most baneful influence on social and political life. These conditions demanded serious attention, and both Julius and Augustus enacted laws that were expected to restore health to the body politic. Later emperors also attempted to encourage population by law.

Julius, it is said,¹ prohibited women of twenty-four who were unmarried and childless from wearing precious metals and jewels and from using litters, and he rewarded those who had large families. In the agrarian law (*de agro campano dividendo*) he ordained that Campanian lands should be held only by citizens having at least three children.

But it is the laws of Augustus that are of by far the greatest importance in this connection. Dion Cassius tells us that Augustus caused the speech of Metellus to be read before the Senate and that he added to it the following:

While sickness and war snatch away so many citizens, what must become of this state if marriages are no longer contracted? The city of Rome, of which we are justly proud, does not consist of its houses, its porticoes and public edifices; it is the men of Rome that constitute the city. We must not expect to see, as in our ancient fables, human beings spring forth out of the earth to perform the work of the state. Your celibacy is not owing to the desire to live alone . . . You seek only to enjoy irregularities undisturbed . . . My only object is the perpetuity of the state. I have increased the penalties of those who disobey; and as to rewards, they are such that I believe virtue has never received greater. For less will a thousand men give life itself; and yet will not these persuade you to take a wife and provide for children?²

¹ *Grand Dictionnaire Universel*, art. "Population." Suetonius, *Julius Caesar*, 20.

² Bks. liv, 15; lvi.

Of the laws of Augustus bearing on our subject the three following are the ones of importance: (1) *Lex Julia de adulteriis et de pudicitia*; (2) *Lex Julia de maritandibus ordinibus*; (3) *Lex Papia et Poppæa*; all of which are sometimes referred to collectively as the *lex* (or *leges*) *Julia et Papia-Poppæa*.¹ Though they were far more comprehensive than other laws had been, it is evident, as Tacitus remarks,² that they are founded on older regulations made by the people, the senate or the censors.

Augustus was extraordinarily thoroughgoing and persistent in his population policy, although he met with strong opposition. It was in the year 18 B. C. that he first came before the senate with the *lex Julia de maritandibus ordinibus*, and, as we infer from Cassius, its direct object was to prevent celibacy, particularly that vicious celibacy which was so frequently to be observed, and to encourage marriage and the rearing of children. He was successful in getting the senate's approval;³ but the opposition of the people, whose consent was necessary, was too great, and in the face of the cry which arose against the proposals he could not enact his law.⁴ He succeeded in carrying through only the law *de pudicitia*, in which provision was made for severe penalties for adultery and illicit relations with free-born girls. But Augustus never gave up his original purpose and plans; his desire was by means of the law to

¹They derive their names from the consuls M. Papius Mutilus and Q. Poppæus Secundus. Cf. Paul Meyer, *Der Römische Konkubinat nach den Rechtsquellen, etc.*, pp. 20-24.

²*Annales*, iii.

³Says Zumpt (*Ueber den Stand der Bevölkerung im Alterthum*, pp. 41-42): "Wahrscheinlich weil die meisten durch ihr vorgerücktes Alter gesichert waren."

⁴Cf. Suetonius, *Augustus*, 34: "præ tumultu recusantium perferre non potuit."

make certain the continuance and increase particularly of the patrician families. He took the matter up again, after a lapse of several years; he removed or mitigated the penalties and increased the rewards, and allowed some years to pass before he attempted to enforce the law. In the year 4 A. D. this law, the *lex de maritandibus*, went into effect. Finally, after various emendations and additions, the *lex Papia et Poppaea* was enacted, though, as Cassius ironically says, neither of the consuls to whom the law owes its name was married or had children.¹ This was in the year 9 A. D.

The scope of the different enactments, which were the most extensive since the Twelve Tables, was intended to affect every source of the existing moral depravity, which was greatly depleting the native Roman population. "Not only marriage," says Ortolan, "but everything even remotely connected with it—betrothal, divorce, dower, gifts between husband and wife, concubinage, inheritance, legacies and their devolution—in fine, the rights, privileges or particular dispensations granted under diverse special circumstances to fathers or to mothers who had children or who had a specified number" were considered in the scope of these laws.²

These laws divided Roman society into three classes: first, unmarried (*caelibes*); secondly, parents (*patres et*

¹ And Zumpt comments (*loc. cit.* in note): "Es ist nicht zu verschweigen, dass die *lex Julia* das infamste Mittel der Chikane wurde, wie allemahl die Gesetzgebung, wenn sie die Stelle der Moralität vertritt. Für die tyrannischen Regierungen, welche Tacitus beschreibt, waren die *crimina adulterii* ein bereites Mittel hervorragende Männer und Frauen zu stürzen." Cf. in general Bertheau, *op. cit.*, pp. 226–227; Beloch, *op. cit.*, p. 503; Cassius, *op. cit.*

² *History of Roman Law* (English edition), p. 309.

matres) ; thirdly, the childless (*orbi*). Their principal provisions may be grouped and summarized as follows :

1. They commanded both sexes to marry and to rear children. The *lex Papia* demanded that persons of the male sex by the twenty-fifth year and persons of the female sex by the twentieth year should have in each case some legitimate children. For those intending to be married there were provisions in the *jura maritorum* which made it obligatory not to postpone marriage more than two years.

2. But the most important provisions in these laws were those providing punishments and rewards, especially in connection with the laws of inheritance and civil rights.

(a) Inheritance. Those who remained unmarried and thus disobeyed the law were made incapable of becoming heirs through any will or testament, and they could not receive legacies, the law making only a very few *cognates* and *affinates* exceptions to the rule. Those who were married but had no children could obtain only half of any inheritance or legacy given them. A married person who had no children could bequeath only one-tenth of his property to his spouse, and the surviving one of the couple was regarded as *caelebs*. The *lex de maritandibus* gave obstinate bachelors a respite of one hundred days that they might still have suitable opportunities to marry ; and, if marriage did not occur in that time, in case of death any property left by them became *caducum* and went to the *aerarium*, or state treasury.

(b) Public Law. Peculiar advantages in public civil rights were provided for those who were married and had many children. At the monthly changes of the *fascēs* the married and those having a great number of children were given preference in rank and honors. In the distri-

bution of offices and in the division of provincial possessions the *jus liberorum* played a considerable rôle.¹

(c) The law provided further favors for those complying with its provisions. The *lex de maritandibus*, for example, gave matrons who had several children—three or four—the right to wear distinctive garments and adornments; and such women were freed from the limitations of guardianship in the *jus liberorum*.²

As these laws contained such a multiplicity of preferences, they gradually developed, under succeeding emperors, into special privileges. Under the successors of Augustus the privileges became more and more specialized in their application, and at times certain classes only were given the benefit of the rewards provided for in the original laws. Not until the reign of Constantine were the more important provisions abrogated.

It is undoubtedly true, as most writers agree, that these laws were a practical failure as far as their intent is concerned. Marquardt says that

the conditions were not bettered by the Julian laws; Rome and Italy in the time of the Empire sank to the lowest moral degradation; the bold immorality and shamelessness of the court as also of the higher classes generally, the break-up of the family, the continuance of vicious celibacy, the public prostitution, the mass of unnatural vices which ruined both mind and body and which the ancient tongues alone seem best able to depict [*cf.* Valerius Maximus VI, 1, 9], the ease with which earnest as well as frivolous writers of the time move about in

¹ Gellius, ii, 15, 4; Tacitus, *Annales*, ii, 51; Mommsen (*Röm. Staatsrecht*), vol. ii, p. 207.

² Gaius, i, 145, 344.

this filth, all characterized the darker side of the times; and it were an ungrateful task to dwell long on the matter.¹

It is certain that such regulations were not sufficient to prevent the decay of a state whose very foundations had begun to weaken in the manner indicated by Marquardt. Whether the Augustan laws attained their end in certain particulars and places or not is a question which it is probably impossible to answer.

§ 3. *Changes in the Lex Julia et Papia-Poppæa. and its Abrogation.* By a law of Tiberius it was made practically impossible for a man of sixty to marry. Under some circumstances he could marry a woman over fifty, but this was not ordinarily permitted because such marriages would be unequal.² These restrictions were, however, abrogated by Claudius.³ So much opposition to the Julian laws developed that Nero found it necessary to lessen the rewards granted to informers who furnished information with regard to violations of this law.⁴ Trajan continued the original policy; moreover, he gave assistance to impoverished parents of the highest class to enable them to rear and educate their children.⁵ This is one of the early evidences of specialization in the application of the laws. Caracalla modified the laws, says Hunter,⁶ by doubling (in-

¹ *Das Privatleben der Römer*, in *Handbuch der röm. Alterthümer*, von J. Marquardt and Th. Mommsen, vol. vii, pp. 79-80. Cf. Stille, *Die Bevölkerungsfrage in alter und neuer Zeit*. Tacitus, *Annales*, iii, 25. Pliny, *Epistulæ*, iv, 15.

² Tacitus, *Annales*, iii, 28: "exolvi plerique legis nexus."

³ Suetonius, *Claudius*, 23: "capiti Papiæ Poppææ legis a Tiberio Caesare, quasi sexagenarii generare non possunt, addito, abrogavit."

⁴ *Ibid.*, Nero, 10: "praemia delatorum Papiæ legis ad quartas redegit."

⁵ Pliny, *Panegyrica*, 26: "sub te liberos tollere libet, expedit."

⁶ *Roman Law*, p. 67.

creasing from one-twentieth to one-tenth) the tax on enfranchisement, inheritance, legacies and *donationes mortis causa*, and by sweeping the *caduca* of *caelibes* into the *fiscus*. On the other hand, we find that Severus, at about the same time, relaxed the rigor of the laws by extending the time and age for marriage.

By the time of Constantine the influence of Christianity had already begun to show itself in imperial legislation. To this influence we may ascribe Constantine's abrogation of the principal features of the Julian laws. The Christian religion of the period did not approve of second nuptials, and it honored celibacy as a meritorious sacrifice. In so far the new religion was bound to clash with the spirit of these laws. The celibates of the early Church were zealous and often able men, and their resistance resulted in the abrogation of the disabilities placed on celibates.¹

From this time on we continually find traces in legislation of Christianity and its ideals. A law of Majorian imposed upon parents the legal obligation of providing dowries for their sons and daughters before marriage; and in the following century the Council of Arles declared "*nullum sine dote fiat conjugium*." Justinian not only made permanent the removal of disabilities on celibates, but he honored and rewarded the type of Christian priests

¹The decree by which Constantine revoked the old penalties is preserved in an article of the Theodosian Code under the title, *De infirmandis poenis coelibatus et orbitatis*. "In jure veteri coelibes habitantur imminentibus legum terroribus liberentur, atque ita vivant ac si numero maritorum matrimonii foedere fulcerentur sitque omnibus aequae conditio cohesse quod quisque mereatur. Nec vero quisquam orbis habeatur: proposita huic nomini damna non nocent." *Cod. Theod.*, bk. viii, tit. 16. (Ca. 320 A. D.) Constantine formally embraced Christianity in 325 A. D., the year of the Council of Nicea, which he attended.

who followed the rule of celibacy; and instead of granting privileges to those who contracted a second marriage, he granted privileges to those who did not.¹ Almost the same provisions concerning population are found in Justinian's laws as in those of Constantine.² Another decree permitted the union in marriage of those of senatorial rank with enfranchised or lower classes—an innovation due to the spirit of Christianity.³ The reign of Justinian then completes the history of the Julian laws,⁴ excepting so far as they have been imitated in modern times.

§ 4. *Attitude toward Population in Latin Literature.* The earliest writers of the Republic regarded marriage as an institution whose sole object was the rearing of offspring—*liberorum quaesundum causa*, as Ennius expresses it.⁵ Plautus expresses the same idea. Towards the end of the Republican period the agricultural writer, Varro, remarks on the desirability of a numerous progeny.⁶ In his *Carmen Saeculare*, Horace makes a covert but hopeful allusion to the Julian laws.⁷ Livy is emphatic in his declaration that offspring are important to the state and desired by the individual.⁸ Pliny the younger expresses the typi-

¹ *Novellae*, 127, cap. vii; 118, cap. 1. ² *Codex*, lib. viii, tit. 58.

³ *Codex*, lib. v, tit. 4, 23; *Novellae*, 89, cap. xv; 117, cap. vi.

⁴ "Et quemadmodum in multis capitulis lex Papia ab anterioribus principibus emendata fuit, et per desuetudinem abolita: ita et a nobis circa caducorum observationem invidiosum suum amittat vigorem, qui et ipsis prudentissimis viris displicuit." *Codex*, lib. xvi, cap. 51. *Cf. Digest*, lib. xxii, tit. 2.

⁵ Androm. ap. Fest.; *cf.* Plautus, *Captivi*, 4, 2, 109.

⁶ Ap. Macrob. Saturn., 1, 16.

⁷ Vv. 17-20, "Diva producas subolem patrumque prosperes decreta super jugandis feminis prolique novæ feraci lege marita."

⁸ Lib. i, cap. 9: "in societate fortunarum omnium civitatisque et quo nihil carius humano genere sit liberum fore."

cal Roman desire that the state should possess as many citizens as possible.¹

The Græco-Roman, Dionysius of Halicarnassus, refers in the *Roman Antiquities* to the advantages of having many children, and expresses his disapproval of celibacy.² Valerius Maximus, in several parts of his work, mentions the measures taken by censors to increase the number of marriages and the desirability of enforcing such laws as those passed by Augustus,³ for unless people married with a serious purpose—*creandorum liberum causa*—the state would soon show signs of weakness.

Tacitus contrasts the purity of the Germans in their conjugal life and the severity with which they punished adultery and similar crimes with the general laxity existing in Roman society. In the *Annals* he refers to the Julian laws and says that they were not able to remedy existing conditions.⁴ The policy continued to be, he says, to increase the penalties for celibacy and thereby increase the revenue. Marriage could not, however, be brought into fashion. To be without children, heirs, was regarded as a state productive of the greatest advantages; the extravagances of the time made the rearing of children a burdensome expense. Dion Cassius records the speech of Augustus to the senate advocating his new measures and comments favorable on them.⁵

¹ *Epistolæ*, vii, "Cupis enim patriam nostram omnibus quidem rebus augeri, maxime civium numero."

² Lib. ii, cap. viii and cap. xviii.

³ Lib. ii, 9; vii, 7: "Aera poenæ nomine eos, qui ad senectutem coelibes pervenerunt, in aerarium deferre jusserunt." Cf. Aulus Gellius, *op. cit.*

⁴ *Annales*, lib. iii, 25; *Germania*, xviii.

⁵ *Op. cit.*

CHAPTER II

RELIGIONS AND POPULATION

I. Oriental and Ancient Religious Doctrines

§ 1. *Phallism and Increase.* In early patriarchal society social rank was largely determined by number of children and dependents; moreover, it was regarded as essential to have sons to carry on the name and to perform the rites of the dead. Such considerations made marriage among primitive peoples an institution of vast significance. Injunctions similar to Jehovah's command, "Increase and multiply," are found in the religions of practically every ancient nation. For this almost universal attitude toward population an explanation may be found in the fact that the early nations were in a state of almost continuous hostility; always menaced and menacing. They were organized not only for peace and industry, but for war and conquest. Under such circumstances it was natural that the constant need of men should have been reflected in religion, customs and law.

In another connection Professor Patten says that

in fighting clans it was necessary to offer every inducement to child-bearing. Festivals, feasts and social gatherings were designed to provoke the passions. Under such conditions the first thought of every woman was not to guard her chastity, but to escape barrenness. Chastity became a dominant motive only after economic welfare had progressed so far that the clans began to disintegrate. . . . There is probably

some truth in the assertion that a woman is more fruitful if she enters sexual relations very young and indulges in amusements that create sexual excitement. At least savage races act on these assumptions and incorporate them in their religion. The gods that primitive women worshipped most eagerly were those that prevented barrenness; and these gods were sure to demand of women licentious acts as a means of securing their favor. The sacrifice of chastity was an early form of worship, and sacred prostitution is an element in primitive religions. . . . When Christianity was introduced, the old festivals with which much licentiousness was associated were not abolished, but were continued under other names. This was the conscious policy of the Church, and was commanded by Pope Gregory.¹

While unable to vouch for the correctness of Professor Patten's statements, the writer thinks that they are undoubtedly well-founded.² Herodotus describes Babylon-

¹ *History of English Thought*, pp. 132-133.

² It should be noted that generation is not attributed to its natural causes among certain of the most primitive types of mankind existing to-day. Procreation is attributed to extra-human causes, such as the influence of some bird, some deity, *etc.* The author has been unable to decide to his own satisfaction whether such a condition is due to degeneration or excessive profligacy, or whether the instances mentioned by Spencer and Gillen (*The Native Tribes of Central Australia, passim*) and a few others indicate a general stage in man's development. In the face of these instances, however, it would certainly be unscientific, at present, to make a general statement to the effect that primitive man was able to appreciate the causality in the generative process. But, in a more cultured stage, phallic worship seems to stand partly in a certain relation to the veneration of sex as the causal foundation of procreation. Man then appeals to a deity or deities not only to further reproduction by granting fertility to his kind, but also to increase or make certain the means by which he subsists. When his social instincts become sufficiently developed he lives not only in a small circle, as in a form of family; but the group widens, and he realizes instinctively that in numbers there is better protection for him and his as against other groups

ian rites that involved universal sacrifice of female chastity;¹ and in parts of Cyprus this custom also prevailed. According to Strabo, there was a law in Armenia requiring a similar sacrifice.² Again, in the valley of the Ganges virgins were compelled before marriage to pay similar homage to a divinity,³ and the same custom is distinctly traceable elsewhere.⁴

While it would be going too far to claim, as some writers do, that all, or even most, religions had a purely phallic origin, it cannot be controverted that so-called phallic ideas have played a great part in very many early re-

and animals. His social nature enables him thus more easily to increase and survive. Only those tribes whose sexual life was of such a character as to be favorable to fecundity would long survive. This would seem to necessitate a certain measure of purity, if the phrase is permissible in this connection; and this purity as well as advancing culture would tend to make a truer comprehension of the reproductive process appear. In criticizing Westermarck's theory of non-promiscuity, Spencer and Gillen say: "The first explanation offered [by Westermarck] is that in certain instances the practice was evidently associated with phallic worship, as, for example, when in the valley of the Ganges the virgins had to offer themselves up in the temples of the Juggernaut. This implies a social development very different from, and much more advanced than anything met with among Australian natives. . . . It is doubtful how far phallic worship can be said to exist among them." Pp. 100-101. Cf. Letourneau, *The History of Marriage and of the Family*, chap. i, § 1. Westermarck and McLennan, however, agree that "the farther back we go the less we find of such [phallic] worship in India; the germ only of phallic worship shows itself in the Vedas and the gross luxuriance of licentiousness, of which the cases referred to are examples, is of later growth." P. 72, Westermarck, *History of Human Marriage*. Cf. Ploss, *Das Kind, Zweites Kapitel*, "Das Mutterhoffen." J. A. Dulaure, *Des Divinités Génératrices ou Culte du Phallus chez les Anciens et les Modernes*, pp. 161-166, 256-258.

¹ Bk. i, chap. 199.

² Bk. xi; cf. Westermarck, *History of Human Marriage*, p. 72.

³ Lubbock, *Origin of Civilization*, pp. 537-538.

⁴ Westermarck, *op. cit.*

ligions and religious ceremonies. The reproductive, fructifying, natural powers naturally aroused the awe and reverence of man.

During a certain stage of human development, religion was but a recognition of and a reliance upon the fructifying powers throughout nature, and in the earlier ages of man's career, worship consisted for the most part in the celebration of festivals at stated seasons of the year, notably during seed time and harvest, to commemorate the benefits derived from the grain field and vineyard.¹

Among the Assyrians, the supreme god Bel was also styled the procreator; and his wife, the goddess Mylitta, represented the reproductive principle of nature and received the title of queen of fertility. Other deities, such as the Vul (the male) and Shala, or Sarrat (the female), had a similar significance. According to Ptolemy, the *phallus* was the object of religious worship among the Assyrians and Persians. The Jews did not escape this worship, and we find that their women made *phalli* of gold and silver.² Among the Hindus the *lingam* and *yoni* received religious reverence, and so also among the Romans the *phallus* and *cteis*. Among the Teutons and Scandinavians the god Fricco, corresponding to the Priapus of the Romans, was adored in phallic form; and instances might be multiplied.³

¹ Gamble, *The God-Idea of the Ancients*, p. 11. Cf. Tylor, *Primitive Culture*, vol i, p. 295, and Max Müller, *Origin and Growth of Religion*, p. 279.

² Ezekiel, xvi, 17.

³ See Westropp and Wake, *The Phallic Idea in the Religions of Antiquity*, pp. 27 *et seq.*; also R. P. Knight, *An Account of the Remains of the Worship of Priapus*; M. Caird, *The Morality of Marriage*, p. 34; Clifford Howard, *Sex Worship*; Edmund Buckley, *Phallicism in Japan*, pp. 5 *et seq.*

Mr. Clifford Howard, who attempts to give a summary of investigations along these lines, says ¹ that phallism is at the basis of many of our most sacred symbols and customs, and he concludes:

While the highest development of phallicism was reached by the ancient Egyptians, Hindus, Assyrians, Greeks and Romans, whose records and remains abound in evidences of the phallic basis of their elaborate mythologies and religious celebrations, the existence of this early form of religion is to be found in every part of the globe inhabited by man. Babylon, Persia, Hindustan, Ceylon, China, Japan, Burmah, Java, Arabia, Syria, Asia Minor, Egypt, Europe, Mexico, Peru, *etc.*, all yield abundant evidence to the same effect and point to a common origin of religious beliefs.²

§ 2. *The Early Religions of India.* The Vedic singers often express the wish to beget sons of their own flesh.³ A common prayer was that a marriage might be blessed by a numerous offspring. As a part of the marriage ceremony, the ancient groom was accustomed to murmur to his bride a number of traditional verses; for example, such as "I am he, thou art she."⁴ Come, we two will go forth;

¹ *Op. cit.*, chap. i.

² The writer is not in a position to judge concerning the correctness of his statement that "sex worship was the universal primitive religion;" but researches in the history of religions would hardly corroborate such a declaration. Cf. Wake (*op. cit.*, p. 78), who takes a position like the one quoted. He traces the story of the "fall of man," the story of the flood (the dove and its return to the ark), circumcision, *etc.*, to what he considers their phallic origin. And he holds "the fundamental basis of Christianity more phallic than that of any other religion now existing."

³ The place of these could not be filled by adoption. Kaigi, *The Rig-Veda*, pp. 15-16.

⁴ Cf. the *Quando tu Gaius, ego Gaia*, of the Romans.

we will beget us posterity; many sons will we get us; they will reach a great age." On reaching their new home the newly-married couple were greeted with admonitions and good wishes, having in the main reference to increase of the family: "Children and children's children grant, Prajâpati;" "Within the home may man and beast increase and thrive;" "Ten children grant and spare to her as an eleventh her dear spouse;" "Take five steps for offspring," etc.¹

Brahminical doctrines attach the greatest importance to male descendants, but after the continuity of the male line was assured by the birth of a grandson, the *devidja* was directed to abandon home and family, to betake himself to the forests to lead the life of a *vana prastha*. The *straddha*, or periodic oblations to the dead, could be performed only by male posterity, and its omission plunged the whole line of dead ancestors from the abodes of happiness to those of sorrow.² Woman was regarded as sexually impure, but fruitfulness was nevertheless esteemed most desirable. Polygamy was approved, possession of many wives being a sign of social eminence. The generative power was considered divine in its nature.³

There was a strong strain of asceticism in pure Brahminism. Celibacy was held in high honor and chastity was inculcated as a religious duty. In reference to chastity it is said: "Many thousand of Brahmins, having avoided sensuality from their early youth and having left

¹ Monier Williams, *Brahmanism and Hinduism*, pp. 363, 364.

² *Laws of Manu*, bk. iv, strophe 257.

³ *Sacred Books of the East*, edited by Max Müller, vols. xliii, pp. 32, 369, 370; xliv, p. 313; xli, p. 354. Westermarck, *op. cit.*, p. 489, says that the polygamy of the ancient Hindus seems to have been due chiefly to the fact that men dreaded the idea of dying childless.

no issue in their families, have ascended, nevertheless, to heaven." "And like those abstemious men, a virtuous wife ascends to heaven, though she have no child, if after the decease of her lord she devote herself to pious austerity."¹ But "reprehensible is the father who gives not his daughter in marriage at the proper time," for "children are the cause of happiness in this world and after death."

Penalties were provided for adultery and abortion;² but a form of polyandry was evidently permitted: "If a man have no children, it is possible for him to get this desired blessing by permitting connections between his wife and his brother or other relative;" and the offspring resulting from such a union was regarded as the husband's, for we read that "the seed and the fruit belong to the owner of the field."³

§ 3. *The Teachings of Confucius and Buddha.* The doctrines of Confucius, like those of many other religions, express the idea, so favorable to increase, that a father whose children are condemned to live in celibacy dies without honor, and a son failed in his first duty if he did not beget children to perpetuate his name and family. This is in agreement with the Confucian system in general, which was a reaction against Brahminism. In the *Lîkî*⁴ we find that the express purpose of marriage is "to secure the continuance of the family line," and that "the ceremony of marriage is the root of the other ceremonial observances."⁵ The young wife was expected to assume the

¹ *Institutes of Hindu Law or the Ordinances of Manu* (Calcutta, 1794), chap. v, vv. 159, 160, p. 143. Cf. Bühler (*S. B. E.*, vol. xxv), pp. 196-7, 332, 328.

² Bühler, pp. 205-216, 315-320, 184.

³ *Laws of Manu*, bk. ix, strophe 59. Cf. Ploss, *Das Weib*, vol. i, p. 572.

⁴ *S. B. E.*, vol. xxvii, pp. 35 and 56. ⁵ *Ibid.*, pp. 428-434.

place of a mother in the family; divorce was allowed in case the wife proved sterile.¹

Buddha Gotama founded a religion which enjoins the strictest celibacy on its sacerdotal class. His teaching was that all ideas of marriage and a happy home-life must needs be abandoned by all wise men, by all who aimed at becoming philosophic Buddhists. This contrasts with the Biblical doctrine that "it is not good for man to be alone."² Although perfect sanctity demanded chaste celibacy, the rule against marriage was naturally admitted to be inapplicable to the great majority of human beings; and none of this great number could be wise men in the Buddhist sense or partake of perfect sanctity. The doctrine was, however, violated even by those who clung to it in theory. Monier Williams says that there is evidence that in northern countries the strictness of this teaching was soon relaxed.³ In Tibet and Ceylon there are to-day many temples inhabited by priests of this system who live in a loose celibacy, as a means of mortification preparing them to enter more readily into the "Great Whole." And

it is known that at the present time the lamaseries in Likkin and Tibet swarm with children of monks, though called their nephews and nieces. And, far worse than this, Buddhism ultimately allied itself with Tantrism, or the worship of the female principle, and under its sanction encouraged the grossest violations of decency and the worst forms of profligacy.⁴

Celibacy was then, and is still, an important element in practical Buddhism. The general asceticism which it in-

¹ Legge, *Chinese Classics*, vol. i, p. 106.

² Genesis, ii, 18.

³ *Buddhism in its Connection with Brahmanism and Hinduism*.

⁴ *Ibid.*, p. 152.

culcates is well illustrated in a chapter on "putting away desire" in the *Life of Buddha*.¹ Here Buddha proves himself exemplary indeed, in that he resists all the allurements of love. He says: "Women, though naturally weak, are high and potent in the way of ruling men. What may not their arts accomplish in promoting in men a lustful desire?" His position seems to be one of pure and austere morality, but the pendulum of his enthusiasm swings too far. His teachings contain more asceticism than did mediæval Christianity, and if carried out they would operate as a most potent check on the increase of population. His extreme views were and are followed by the priests alone, and that, too, often according to the letter and not according to the spirit of his injunctions.²

§ 4. *Zoroastrianism and Mohammedanism in Their Relations to Population.* The sacred books of Zoroaster, the *Zend-Avesta*, are full of religious effusions favoring those conditions which encourage marriage and make the race productive.³ "I prefer the *paterfamilias* to the childless," said this religious teacher of the Perso-Iranians, and in Persia even to-day sterility is considered a terrible misfortune.⁴ The marriage song found in the *Zend-Avesta* is a eulogy of the procreating powers and their proper use. Zoroaster's whole teaching is unquestionably emphatically favorable to increase and against those things which would

¹ In World's Great Classics, *The Sacred Books of the East*, p. 314.

² Westermarck, *op. cit.*, p. 425, says that Buddhist monks regard marriage simply as a concession to human frailty and it is therefore made a civil contract, but it is nevertheless commonly connected with some religious ceremony, often being celebrated with the assistance of a *lama*, thus receiving a sort of religious sanction.

³ Cf. *Grand Dictionnaire Universel*, art. "Population."

⁴ Blavatsky, *A Master Key to the Mysteries*; Nietzsche, *Thus Spake Zarathustra*.

retard it. Children were a man's strength and honor, and necessary to success and the truest happiness.¹

In the fourth chapter of the *Koran*, Mohammed expressly teaches that polygamy is permissible. It is undoubtedly true that the sensual receives a great deal of emphasis as well as approval in Mohammedanism. It is demanded, however, that respect be paid to women, especially to wives and mothers. Mohammed lays great stress on the giving of dowries to women, and he gives instructions regarding inheritances, from which women are not excluded, but receive smaller portions than men.²

The encouragement held out to large families by the Mohammedan religion have been counterbalanced by the warlike habits and the polygamous marriage arrangements of the people holding this faith. Polygamy is ordinarily considered less fruitful than monogamy, and for this reason Mohammedanism tends indirectly, if not to diminish, at any rate to multiply population less rapidly than do Christian doctrines, for example. The theoretical influences of the religion have strongly favored increase. According to Lady W. Montague, "The women of this religion are taught to believe that they best insure their future happiness by employing themselves in making young Mussulmen, while those who die unproductive perish in a reprobate state."³

"The promise of Paradise to every man who had ten children," says Malthus, "would but little increase their

¹ *S. B. E.*, vol. xxxi, pp. 190-192.

² The *Qur'ân*, translated by E. H. Palmer, pt. i, chaps. i-xvi (In *S. B. E.*).

³ Roscher, *Political Economy*, vol. ii, "Population;" George Ensor, *Inquiry Concerning the Population of Nations*, p. 7.

numbers, though it might greatly increase their misery;"¹ and Mr. Bonar adds:

It could only increase their numbers if it increased their food and it could not increase their food without changing their warlike habits into habits of industry. Failing this, it simply creates a constant uneasiness (through want and poverty) that multiplies occasions for wars. Fortunately for himself, the Arab often proportions his religious obedience to the extent of his resources, and in hard times, "when there is a pig at hand and no Koran," he thinks best to eat what God has given him.²

§ 5. *The Religions of Egypt, Greece and Rome.* The Egyptian worship of Isis and Osiris endowed sex characteristics with a mystic significance and made the process of reproduction a subject of religious veneration. In Egypt the act of generation was consecrated to Khem, as in Assyria to Vul and in India to Siva; in Greece in the primitive age to Pan and in later times to Priapus, and in Italy to Mutinus.³ Renouf remarks that "no historical connection can be admitted between the Egyptian and the Indo-European doctrines of the necessity of marriage, and all doctrines of religious celibacy may very probably turn out to be historically independent of one another."⁴ Cer-

¹ *Op. cit.* second edition, p. 94, seventh edition, p. 65.

² Bonar, *Malthus and his Work*, p. 111.

³ Westropp and Wake, *op. cit.*, pp. 28-29. Colonel Tanin (in *Secret Museum of Naples*) says that "the reverence as well as worship paid to the *phallus* in the early ages had nothing in it which partook of indecency, but of reverential religion. The indecent ideas attached to the phallic symbol were, though it seems a paradox to say so, the result of a more advanced civilization verging towards its decline, as we have evidence at Rome and Pompeii."

⁴ Renouf, *Origin and Growth of Religions as Illustrated by the Religion of Ancient Egypt*, pp. 150-151.

tain celibate doctrines prevailed also in Europe, but the general religious tendency seems always to have been one of great veneration for the reproductive powers.

The Greek and Roman religions clearly manifest the veneration in which the reproductive forces were held. We need only recall the worship of Venus and Priapus and the festivals connected with it to convince ourselves of a potent relation between their religious and their sexual life.

The *liberalia* and the *bacchanalia* were festivals in honor of Venus, Priapus and Bacchus, and for the purpose of worshipping the reproductive and amorous nature given by them to man. In the month of April, when the fertilizing powers of nature begin to operate and the reproductive forces manifest themselves, a festival in honor of Venus, the goddess of sexual love, took place at Rome; in it the *phallus* was carried in a decorated car and led in a procession of Roman matrons to the temple of Venus outside the Colline Gate, and presented to the goddess.¹ The Orphic and Eleusinian Mysteries, so closely connected with the sexual, are said by Herodotus to be of Egyptian origin. Venus and Diana personified the great maternal principle. The dances and festivals of Bacchus were scenes of sensual pleasure and indulgence.

The Roman desire for offspring was closely connected with the necessity of continuing the family worship. Voigt, in speaking of the *manus* of the *paterfamilias*, says:

On the other hand there are a great many duties connected with

¹ This, says Westropp, *op. cit.*, pp. 24 *et seq.*, is only symbolizing the idea expressed by Vergil in the Georgics (II): "Vere tument terrae, et genitalia femina poscunt; Tum pater omnipotens fecundis imbribus æther Coniugis in gremium lætæ descendit et omnes Magnus alit, magno commixtus corpore, foetus." Cf. Arnobius, vol. vi, p. 471, *Ante-Nicene Fathers*.

such a position of power . . . So we find that one of his nearest duties was by entering marriage and performing his marital duties to have a care for the procreation of a numerous, legitimate progeny; for, as the purpose of the marriage institution is typically expressed in the familiar *liberum quæsumdum gratia*, the begetting of children is not only a political but also a sacred duty, since it is the sons of the family who continue the *sacra familiaria*.¹

And we see that in this respect also the classical religious ideas did not diverge from the typical ancient form.

§ 6. *The Religion of the Ancient Hebrews in its Bearings on the Population Question.* The position taken by the Israelites, as shown in their religion, is perhaps clearer than that of any other people, as indicated in sacred books. The general view recognized the advisability of following the injunction given to Adam and Eve in Paradise: "Be fruitful and multiply and replenish the earth."² Unfruitfulness was regarded as a serious misfortune. This is indicated in such stories as that of Rachel:³

And when Rachel saw that she bare Jacob no children, Rachel envied her sister; and said unto Jacob, Give me children or I die. And Jacob's anger was kindled against Rachel; and he said, Am I in God's stead, who hath withheld from thee the fruit of thy womb? And she said, Behold my maid Bilhah, go in unto her; and she shall bear upon my knees, that I also may have children by her. And she gave him Bilhah her hand-maid to wife; and Jacob went in unto her. And Bilhah conceived and bare Jacob a son . . . And God remembered Rachel, and God hearkened to her, and opened her womb. And she conceived, and bare a son; and said, God hath taken away my reproach.

¹ *Op. cit.*, p. 244.

² *Genesis*, i, 28.

³ *Ibid.*, xxx, 1-28.

In this story we see reflected with exceptional clearness the desire of women in a primitive age to avoid barrenness above all things. Chastity, in the modern sense, was of small consequence.¹

The laws of Moses, as is well known, permitted polygamy, "for the hardness of their hearts," and that it was common among the higher classes even a cursory acquaintance with the Scriptures will reveal. The laws against adultery were severe. The hygienic prescriptions were of wide effect and undoubtedly wholesome.²

The prophetic promises of Jehovah to the patriarchs,³ that their seed should be as numerous as the sands of the shore or as the stars in the heavens, also indicate the great sanctity of offspring and the desire for great numbers. The Jews shared this feeling with all tribes or nations in similar positions. It was to be expected that they should regard great populousness as indissolubly connected with national prosperity. - David's counting of the people was due to the desire to gain a more accurate estimate of the nation's strength in fighting men.⁴

The possibility of becoming an ancestor of the Messiah was of no small importance; it imparted a peculiar dignity to marriage and parentage.⁵

The Jewish ideals were naturally in severe opposition

¹*Cf. Deuteronomy, xxv, 5-6.*

²Found in various parts of the books attributed to Moses. *Cf. also Judges, xiii, 14; Exodus, xx, 14; Leviticus, xviii, 20.*

³Of course the writer cannot take cognizance here of such statements as that of Renan, that "there was no Abram and there was no Isaac, and Jacob was the name of a tribe." It is not necessary to regard so-called higher criticism for the purpose here in mind.

⁴*II Samuel, xxiv.*

⁵*Cf. Genesis, iii, 15; in general, G. S. Goodspeed, Israel's Messianic Hope to the Time of Jesus.*

to any celibate or monastic development. Populousness was obviously of great advantage to them and always desired.¹ There were, however, some remarkable exceptions among the Essenes, who had founded a monastic society whose members abstained from marriage. But even they, in general, considered succession to be of the greatest moment.²

NOTE.—Of the passages in the Old Testament bearing upon this question, the following will be of interest:

Genesis xxviii, 14: And thy seed shall be as the dust of the earth; and thou shalt spread abroad to the west, and to the east, and to the north, and to the south; and in thee and in thy seed shall all the families of the earth be blessed.

Deuteronomy xxvi, 5: And he went down into Egypt and sojourned there with a few, and became there a nation, great, mighty and populous.

Proverbs xiv, 28: In the multitude of people is the king's glory: But in the want of people is the destruction of the prince.

Proverbs xvii, 6: Children's children are the glory of old men; and the glory of children are their father's.

Psalms cxxvii, 3-5: Lo, children are an heritage of the Lord; and the fruit of the womb is his reward. As arrows are in the hand of a mighty man, so are children of the youth. Happy is the man that hath his quiver full of them: they shall not be ashamed, but they shall speak with the enemy in the gate.

Ecclesiastes iv, 8: There is one that is alone, and he hath not a second; yea, he hath neither son nor brother; yet there is no end of all his labor, neither are his eyes satisfied with riches. For whom then, saith he, do I labor, and bereave my soul of good? This is also vanity, yea, it is a sore travail.

Jeremiah xxii, 30: Write ye this man childless, a man that shall not prosper.

¹ Lecky, *op. cit.*, p. 108.

² Cf. Westermarck, *op. cit.*, p. 379. See also Robertson Smith, *Lectures on the Religion of the Semites* (new edition), p. 380.

The following verse indicates an early realization of the dependence of a people on the subsistence the land will produce; and that when the limit is about reached the natural resource is migration:

Genesis xiii, 6: And the land was not able to bear them that they might dwell together: for their substance was great, so that they could not dwell together.

II. *The Primitive Christian and Mediaeval Conception of Marriage, with its Relation to Increase in Numbers.*

§ 1. *Saint Paul and Early Asceticism.* Christianity was a reaction against a rigid system of traditions, and its aim was to raise men to higher ethical and moral ideals. It was, furthermore, a protest against the immoral conditions developed in the early Roman Empire and the unsatisfactory and incomplete philosophies of the time. That it was more than this the writer does not deny, but it was these conditions which seem most to have affected the matter which is here treated.

Whether Christianity and Malthusianism are in opposition to one another, as Sadler asserts,¹ or not, is a question we shall not attempt to decide. But such a view would seem far-fetched, to say the least, for Christianity is essentially unworldly in its ideals, whereas Malthusianism deals with an intensely human problem.

Christianity, even in its primitive development, was too cosmopolitan in its nature to permit of narrow, national prejudices to anything like the extent so common in the older religions. But Christianity was more than cosmopolitan; it contained also an extra-mundane philosophy of life and destiny which ennobled existence, but which also carried to extremes. If we survey the early patristic literature in

¹ *Law of Population*, vol. i, p. 387.

an effort to gain some idea of the relations between Christianity and the state, we notice a spirit which is in contrast with the old classical theories concerning the state and the individual. We do not find that "man is a political animal," but that his real home is in another world and his mission celestial; all earthly countries and institutions are of secondary importance. Justin, for example, says that "every foreign land is our country and we are aliens in every country."¹

It was but natural that under these conditions an element of asceticism should appear in the religion. Concerning this Nitti says:

All the primitive Christian sects, those which carried their idealism furthest, abhorred matrimony; the Manicheans² utterly condemned it, the Eucratists, the Docetists, the Marcionites, all recommended chastity . . . It is true that Christianity has honored and sanctified matrimony, but it has preferred chastity. The apostles, the saints, the men whom the churches venerate have nearly all been chaste, and, in every case, have only reached perfection when they attained chastity. In all lives of the saints, the most meritorious actions and those most generally praised refer to chastity and the resistance to the temptations of the flesh . . . But Christianity, and later Catholicism, losing its primitive ascetic fervor, adapted itself to places and times. With the disappearance of mysticism the Christian religion was, and still is, among modern peoples, a stimulus to fecundity. Indeed, not infrequently among the poor, a belief in providential aid leads to the contracting of matrimony and the avoidance of celibacy and fornication.³

¹ *Ad Diogenem*, cap. 5, 6. Cf. Chrysostomus, Homily 17, "to the people of Antioch;" also Homily 28, in *Letter to the Hebrews*.

² Cf. Augustin, *On Continence*, chap. xxii.

³ *Op. cit.*, pp. 119-120.

Karl Kautsky, in a discussion of the inefficacy of the Julian laws and of the depopulating tendency of the Empire, says¹ that this tendency was aided by Christianity with its asceticism, which checked marriage and the rearing of offspring. The oriental origin of the religion, he thinks, only increased the ascetic fanaticism; and though the fall of the Empire was not caused by Christianity, it was hastened by it. With some bitterness he remarks that Christianity not only increased existing evils of society, but it hid from knowledge their existence. With the spread of Christianity the interest in worldly affairs greatly decreased, and this was not least true of interest in politico-economic subjects. Abstinence was preached solely for religious reasons. Kautsky thinks that Christian writers during the whole of the Middle Ages did not understand, or at any rate appreciate, the influence of population on the welfare of the people.²

But, on the other hand, Lecky says that the Church, "with unwavering consistency and with the strongest emphasis," contrasting sharply with existing conditions, condemned infanticide and abortion and divorce and licentiousness of all kinds.³ All this, with the charity which it inculcated, could not but have had many desirable effects.

The question naturally arises, on what basis do the ten-

¹ *Der Einfluss der Volksvermehrung auf den Fortschritt der Gesellschaft*, p. 17.

² Cf. Lucien Schöne, *op. cit.*, p. 62: "On est ainsi promptement transporté loin des excitations à la multiplication de l'espèce rencontrées jusqu'alors dans l'étude de l'antiquité. Les sectes qui surgirent dans les premiers siècles de l'ère Chrétienne s'en sont encore davantage éloignées. —Another French writer (*Encyclopédie de Diderot*, art. "Population") puts the case thus: "Le père le plus religieux et le meilleur sera celui qui fera le moins pour multiplier sa famille. Il n'a pas proprement pour effet de peupler la terre, son vrai but est de peupler le ciel."

³ *Op. cit.*, p. 24.

dencies and teachings of the Church rest? The answer is found in the content and in what was believed to be the intent of the teachings of Christ and his apostles. The fact that Christ and many of his disciples were celibates and that Mary was always associated with virginity could but lend a great deal of sanctity, among primitive Christians, to ideals of chastity. Christ's sympathy for women and his love of children, his moral teachings, his doctrine that men should not worry excessively about the future and that men should work if they are to eat, his honoring a wedding by his attendance, do not indicate any ascetic ideas concerning marriage or offspring. To the writer it seems that he advocated prudence without too much speculative forethought.

The main foundations for the celibate practices and doctrines of early Christianity are undoubtedly to be found in the sentiments expressed by Saint Paul:

It is good for a man not to touch a woman. But, because of fornication, let each man have his own wife and let each woman have her own husband . . . But this I say by way of concession, not of commandment. Yet I would that all men were even as I myself. Howbeit, each man has his own gift from God. But I say to the unmarried and widows, It is good for them, if they abide even as I . . . And if a virgin marry, she hath not sinned. Yet such shall have tribulation of the flesh . . . He that is unmarried is careful for the things of the Lord, how he may please the Lord: but he that is married is careful for the things of the world . . . So then he that giveth his own virgin daughter in marriage doeth well; but he that giveth her not in marriage shall do better.¹

The following passages are of the same tenor:

¹ *I Corinthians*, vii.

Romans ix, 13: For if ye live after the flesh ye shall die: but if ye through the Spirit do mortify the deeds of the body ye shall live.

Colossians iii, 5: Mortify therefore your members which are upon the earth; fornication, uncleanness, inordinate affection, evil concupiscence, and covetousness, which is idolatry.

I Thessalonians iv, 3: For this is the will of God, even your sanctification, that ye should abstain from fornication.

I Timothy v, 3: Honor widows that are widows indeed.

I Timothy v, 11-14: But for the younger widows refuse: for when they have begun to wax wanton against Christ, they will marry; . . . I will therefore that the younger women marry, bear children, guide the house, give none occasion to the adversary to speak reproachfully.

Sentiments similar to the above are expressed by others also; for example:

Matthew xix, 12: For there are some eunuchs, which were so born from their mother's womb: and there are some eunuchs, which were made eunuchs of men: and there be eunuchs, which have made themselves eunuchs for the kingdom of Heaven's sake. He that is able to receive it, let him receive it.

I Peter ii, 11: I beseech you as strangers and pilgrims, abstain from fleshly lusts, which war against the soul.

We should, perhaps, expect that the early followers of the Nazarene, in the ardor of a new and pure faith, when thus exhorted, to fall into some unreasonable ascetic excesses. Their environment, too, would naturally tend to make the most devoted adherents revolt, sometimes extravagantly, against prevalent immorality. It seems to the writer that the ordinary, modern Protestant interpretation of these exhortations as meaning simply a strong advocacy of chastity in the general sense of purity is more in accord

with the intent of New Testament doctrine as a whole than the one maintained by the primitive Church and the Church Fathers. The position taken by the latter is, however, probably in truer agreement with the literal content of the writings of Saint Paul. The fact that Christ, like so many early religious teachers and philosophers, was a celibate, and Mary was always spoken of as "the Virgin," also furnishes ground for the position taken by the Church.

§ 2. *The Patristic Writings.* The study of the population question in the quite extensive literature left us by the Church Fathers involves necessarily a consideration of their opinions on chastity and marriage. These matters are all treated from a religious standpoint and as parts of one great theme, namely, the sexual. The ideas expressed by these writers, as well as those appearing in later clerical expositors of the Faith, naturally reflect most strongly purely Christian doctrines, but the influence of Roman social and institutional life and thought and of the philosophic literature of the Greeks is also apparent.

It would be a very difficult matter to determine what the political and economic effects of these views were. A more complete knowledge of Roman history than the world yet possesses would probably be necessary before a final and satisfactory answer to this question could be given.

The unworldly point of view involved a theoretical disregard of marriage. What is more, marriage was often spoken of as unclean and as a kind of animalism to be avoided; so that celibacy and virginity were considered as possessing greater sanctity than any other condition. Matrimony and family life were, however, regarded as generally necessary and permissible. As Lecky says:

the object of the ascetic was to attract men to a life of virginity, and, as a necessary consequence, marriage was treated

as an inferior state . . . In general it would be difficult to conceive of anything more coarse and more repulsive than the manner in which they regarded it.¹

But in justice to the patristic attitude, it must not be forgotten that the circumstances of the times seemed to warrant a great deal of what we find in their opinions. Family life was, as we know, at a very low ebb, and too often all matters connected with the sexual life of the people were in reality synonymous with uncleanness and debauchery.

(a) *The Ante-Nicene Fathers*. Opinions seem to grow more and more severe, until they find their most extreme expression in the Nicene and Post-Nicene writings. In the most primitive period of Christianity, Lecky says,

there are two facts connected with it which every candid student must admit. The first is, that in the earliest period of the church, the privilege of marriage was freely accorded to the clergy. The second is, that a notion of the impurity of marriage existed, and it was felt that the clergy, as pre-eminently the holy class, should have less license than laymen.²

Lecky's statement finds some verification in the general tone of Ignatius's *Epistle to Polycarp*, in which he says: "It becomes men and women to marry and to form their union with the approval of the bishop, that their marriage may be according to the Lord and not according to their own lust."³ The same spirit runs through the *First Apology* of Justin the Martyr.⁴ "But as for us," he says,

we have been taught that to expose newly-born children is the

¹ *Op. cit.* ² *Op. cit.*, vol. i, p. 325; Cf. Westermarck, *op. cit.*, p. 151.

³ Chap. v. Found in volume i of *The Ante-Nicene Fathers*, edited by Alexander Roberts and James Donaldson.

⁴ Chaps. xxvii-xxix.

part of wicked men; and this we have been taught lest we do any one injury . . . first, because we see that almost all so exposed (not only girls but also the males) are brought up to prostitution; and again (we fear to expose children) lest some of them be not picked up, but die, and we become murderers . . . But whether we marry, it is only that we may bring up children; or whether we decline marriage we live continually.

Irenaeus strongly disapproves of the opinion of those who declare that marriage and procreation are of the devil.¹

Clement of Alexandria says that to despise marriage is wrong, though purity and chastity are always commendable; and vice is to be abhorred. Again and again he asserts that a life of chaste wedlock is not to be accounted imperfect. Marriage may result in good or in evil; if the laws of matrimony are not transgressed it is well. Marriage has its purpose and was blessed by God. If the parties to a union are continent and rear children so that they become good men and women, they are not to be considered blameworthy.² He refuses to accept the extreme declarations of those who regard marriage as wrong,³ and in all marital relations he advises purity, temperance and continence.

¹ *Against Heresies*, bk. i, ch. xxiv, sec. 2: "nubere et generare a Satana dicunt."

² *Paedagogus*, cap. x: "Quaenam de procreatione liberorum tractanda sint: Tempus autem opportunum conjunctionis solis iis relinquitur considerandum, qui juncti sunt matrimonio; qui autem matrimonio juncti sunt iis scopus est et institutum, liberorum susceptio: finis autem, ut boni sint liberi."

³ *Stromata*, lib. iii, cap. xvii: "Qui nuptias et generationem malas asserunt et dei creationem et ipsam evangelii dispensationem vituperant: duas extremas opiniones esse vitandas: primam illorum qui creatoris odio a nuptiis abstinant; alteram illorum qui hinc occasionem arripiunt nefariis libidinibus indulgendi."

Theophilus of Antioch says that chastity is not a mere outward form; it is largely a matter of purity of heart. Marrying a divorced woman, he thinks, is only a more tolerable form of adultery.¹

Athenagoras, in his *Plea for the Christians*, makes the following statement:

Therefore having the hope of eternal life, we despise the things of this life, even to the pleasures of the soul, each of us reckoning her his wife whom he has married according to the laws laid down by us, and that only for the purpose of having children. For as the husbandman, throwing the seed upon the ground, awaits the harvest, not sowing more upon it, so to us the procreation of children is the measure of our indulgence in appetite. Nay, you would find many among us, both men and women, growing old unmarried, in the hope of living in closer communion with God. But if the remaining in virginity and in the state of an eunuch brings nearer to God while the indulgences of carnal thought and desire leads away from him, in those cases in which we shun the thoughts much more do we reject the deeds.²

And he adds that a second marriage is but little better than a specious adultery.

In his dissertation against Marcion, Tertullian, "the founder of Latin Christianity," eloquently defends marriage as holy, and carefully discriminates between Marcion's doctrine of the impurity of marriage and his own Montanism.³ In regard to his own position he says: "We do not reject marriage, but simply refrain from it;" and he would defend it "whenever hostile attacks are made on

¹ *Theophilus to Autolycus*, chap. xiii. On Chastity.

² Chap. xxviii.

³ Cf. Adolph Harnack, *Die Chronologie der alt-christlichen Litteratur bis Eusebius*, vol. i, pp. 363 *et seq.*

it as a polluting thing, to the disparagement of the Creator. For he bestowed his blessing on matrimony also, as an honorable state, for the increase of the human race."¹ And in his epistle to his wife² he says also: "We do not, indeed, forbid the union of man and wife, blessed by God as the seminary of the human race and devised for the replenishment of the earth, and therefore permitted, yet singly" (monogamously). He condemns inordinate passion and its exercise. "There is a great difference between a cause and a fault, between a state and its excess." He is emphatic in advising control in conjugal life. God did not only say, "Be fruitful and multiply," but also "Thou shalt not commit adultery" and "Thou shalt not covet thy neighbor's wife."

He admonishes virgins especially to use veils, "for all ages are perilled in your person; but we also admonish you women of the second degree of modesty, who have fallen into wedlock, not to outgrow the discipline of the veil;" which is simply an expression of his abhorrence of the immodest costumes affected in the degenerate society of the time.

He reverts³ to Saint Paul in saying that marriage is good, but celibacy is better: "What, however, is better than this good we learn from the apostle who permits marriage but prefers abstinence." He considers such rigid continence possible, for "though the flesh is weak, we read that the spirit is strong."⁴

The love of offspring as an excuse for marriage, he says, is idle.

For why should we be eager to bear children, whom when we

¹ Chap. xxix.

² Bk. i, chap. ii.

³ *To his wife*, chap. iii.

⁴ *Ibid.*, chap. iv.

have them, we desire to send before us to glory; . . . desirable as we are ourselves to be taken out of this wicked world. . . . To the servant of God, forsooth, offspring is unnecessary . . . Whether it be for the sake of the flesh, or of the world, or of posterity that marriage is undertaken, none of these necessities, so-called, affects the servants of God.¹

In some of the treatises attributed to Cyprian we find chastity most highly lauded. In the one entitled, *Of the Discipline and Advantages of Chastity*, we read: "Chastity is the dignity of the body, the ornament of morality, the sacredness of the sexes, the bond of modesty, the source of purity, the peacefulness of home, the crown of concord," etc.² He declares that "Chastity maintains the first rank in virgins, the second in those who are continent, the third in case of wedlock;" and "Virginity is the triumph over pleasures; virginity has no children; but what is more, it has contempt for offspring; it has not fruitfulness, but neither has it bereavement; blessed that it is free from the pain of bringing forth, more blessed still that it is free from the calamity of the death of children."

In writing *On Virginity*, Methodius mingles his conceptions of the evolution of human marriage with his ideas concerning the attainment of perfection, in the following manner:

For the world, while still unfilled with men, was like a child, and it was necessary that it should first be filled with these, and so grow to manhood. But when thereafter it was colonized from end to end, the race of man spreading to a boundless extent, God no longer allowed man to remain in the same ways, considering how they might now proceed from one point to another, and advance nearer heaven, until having at-

¹ *To his wife*, chap. v.

² Pp. 588-589, especially, *Ante-Nicene Fathers*, vol. v.

tained to the greatest and most exalted lesson of virginity they should reach to perfection; that first they should abandon the intermarriage of brothers and sisters and marry wives from other families; and then that they should no longer have many wives, like brute beasts, as though born for the mere propagation of the species; and then that they should not be adulterers; and then again that they should go on to continence, and from continence to virginity, when, having trained themselves to despise the flesh, they sail fearlessly into the peaceful haven of immortality.¹

In the second discourse on the same subject, he defends the procreation of children against allegations of impurity. He says:

Now the sentence and ordinance of God concerning the begetting of children is confessedly being fulfilled to this day, the Creator still fashioning men, . . . and we must not be offended at the ordinance . . . from which moreover we ourselves have our being . . . Wherefore, if God still forms man, shall we not be guilty of audacity if we think of the generation of children as something offensive? ²

But nevertheless virginity is a better state than matrimony, and it is to be commended and cultivated as much as conditions and the frailty of humanity will permit.³

Lactantius is probably more ascetic in his writings than any of his more prominent predecessors or contemporaries. This is apparent especially in the chapter on matrimony and continence of *The Divine Institutes*.⁴ Animalism of

¹ Discourse i. *On Virginity*.

² Discourse ii, chaps. i and ii.

³ *Ibid.*, chap. vi.

⁴ Lib. vi, cap. xxiii. "De tactus voluptate et libidine atque de matrimonio et continentia: Cum excogitasset Deus duorum sexuum rationem, attribuit iis, ut se invicem appeterent, et conjunctione gauderent. Itaque ardentissimam cupiditatem cunctorum animantium corporibus ad-

all kinds, and particularly sexual sensualism, are reprehensible. Though the passions are strong, they must be coerced. Obscenity and sexual instincts are of man's lower nature, and it is a Christian's foremost duty to be on guard lest his desires become his master. In the epitome of the *Divine Institutes* he continues his discussion along the same lines. The passion of sexual desire, he says, is implanted in man for the procreation of offspring; "but they who do not fix its limits in the mind use it for pleasure only. Thence arise unlawful loves, adulteries and debaucheries; thence all kinds of corruption." This passion must, therefore, be kept within bounds and directed into the right course, in which, though it be vehement, it cannot incur blame. Purity is, however, not only of the body; it is primarily of the mind; and evil thoughts leading to dangerous desires are to be avoided. In general, his teaching is that of one advocating a really strict continence with endeavors to avoid all thought of this world's idle pleasures. He does not, however, pass the limit already defined in this matter—namely, that marriage is to be permitted, and is good if rightly, that is continently, used.¹

miscuit ut in hos affectus avidissime ruerent, eaque ratione propagari et multiplicari genera possent. Quæ cupiditas et appetentia in homine vehementior et acrior invenitur; vel quia hominum multitudinem voluit esse majorem, vel quoniam virtutem solis hominibus dedit, ut esset laus et gloria in coercendis voluptatibus, et abstinencia sui. . . . Sicut autem dedit nobis oculos Deus, non ut spectemus, voluptatemque capiamus, sed ut vidiamus propter eos actus qui pertinent ad vitæ necessitatem, ita genitalem corporis partem quod nomen ipsum docet, nulla alia causa nisi efficiendæ sobolis accepimus."

¹ *Divine Institutes*, bk. vi, chap. xxiii. "Praeterea non tantum adulterium esse vitandum, sed etiam cogitationem; ne quis aspiciat alienam, et animo concupiscat: adulteram enim fieri mentem. Mens est profecto qui peccat . . . in hac crimen est, in hac omne delictum." Cf. *Dissertation on the Workmanship of God or the Formation of Man*, cap. xii. De utero, et conceptione atque sexibus; also *Epitome*, chap. lxi.

In the so-called *Constitutions of the Holy Apostles*¹ we find sexual relations discussed. All extra-matrimonial relations and all unnatural vices are severely condemned.²

For you ought to know this, that once marrying according to the law is righteous, as being according to the will of God, but second marriages, after the promise, are wicked, not on account of the marriage itself, but because of the falsehood. Third marriages are indications of incontinency. But such as are beyond the third are manifest fornication.³

Origen's treatment of marriage and celibacy are simply reflections of the admonitions contained in the writings of Paul and Matthew. In the *Commentary on Matthew*, he speaks of "some laws given by concession to human weakness;" thus it happens that marriage, though not evil, is a "concession."⁴

(b) *The Post-Nicene Fathers*. There seems to be a more substantial agreement concerning the comparative merits of marriage and virginity among the writers in the centuries immediately following the Nicene Council of 325 A. D. than before this time; but the general position taken indicates but little advancement.

Of all the early writings by the Church Fathers, those of Eusebius indicate the most complete insight into sexual problems as affecting population. His opinions are expressed most fully in his *Oration on Constantine*. He ridicules the pagan belief in procreation among the gods.⁵

"God," says Eusebius,

bade the race increase, and each healthy region of the world,

¹ "A compilation, the material being derived from sources differing in age," vol. vii, *Ante-Nicene Fathers*.

² Bk. vi, sec. v, chap. xxviii.

³ Bk. iii, sec. i, chap. ii.

⁴ Chap. xxiii.

⁵ Chap. iv.

as far as the bounds of the circumambient ocean, became the dwelling-place of men; while with this increase of numbers the invention of the useful arts went hand in hand. Meantime the various species of the inferior animals increased in due proportion.¹

A little farther on he continues:

Vice has its origin from nature, not from fate, and virtue is the due regulation of natural character and disposition . . . The events which befall men are consequent on the term of their lives . . . Hence pestilence or sedition, famines and plenty, succeed in turn, declaring plainly that these things are regulated with reference to our course of life. For the Divine Being delights in goodness . . . Or do not the proportion and alternate succession of land and water, serviceable, the one for husbandry, the other for the transport of such foreign products as we need, afford a clear demonstration of his exact and proportionate providential care?²

In these remarks of Eusebius it is, perhaps, not difficult to discover resemblances to the confidence of Luther in God's foreseeing care and to the "Divine Order" of Suessmilch, as well as to a kind of fatalistic pessimism which seems associated with Malthusianism; but to say that Eusebius comprehended the problem of population in any but an incomplete and incidental way would be to read modern theory into his lines.

In answer to a question concerning the proper use of marriage and the procreative power, Athanasius states that this is "that lawful use which God permitted when he said, 'Be fruitful and multiply and replenish the earth,' and . . . which the apostle approves in the words, 'Marriage is honorable and the bed undefiled.' He is blessed

¹ *Post-Nicene Fathers* (Schaff), chap. v, vol. i.

² Chap. vi.

who, being freely yoked in his youth, naturally begets children." There are two ways of attaining God's blessing: "the one ordinary, called marriage; the other angelic and unsurpassed, namely, virginity."¹

In his *City of God*, that imposing personality of the early Church, Saint Augustine enters into quite a detailed consideration of the sexual problem. He attempts, first,² to show how sin, resulting from the fall, has brought about a weak shame in regard to all matters concerning procreation. The sexual desire is, he says, like anger, a passion, and is not subject to reason, at least in some of its phases. He argues that

it is now necessary, as it was not before man sinned, to bridle anger and lust by the restraining influence of wisdom. . . . But that blessing upon marriage which encouraged man to increase and multiply was given . . . in order that the procreation of children might be recognized as part of the glory of marriage and not of the punishment of sin.

Saint Augustine discusses the question of procreation also from a quasi-physiological point of view.³

The same topics are treated also in his moral treatises. In the one *On Continence*,⁴ he opposes the teachings of the Manicheans, who held extreme views in regard to the utter impurity of marriage. In the *Good of Marriage*, he says:

And on this account it is good to marry because it is good to

¹ Letter xlviii.

² Bk. xiv, chaps. xvi *et seq.*

³ In apology for the necessarily frank nature of his arguments, Augustine remarks: "Whoever, then, comes to the perusal of these pages with unchaste mind, let him blame his disposition—let him brand the actings of his own impurity, not the words which necessity forces us to use."—*City of God*, bk. xiv, chap. xxiii.

⁴ Chap. xxii.

beget children, to be a mother of a family: but it is better not to marry . . . When we gather that, even in the first times of the human race, chiefly for the propagation of the People of God, through whom the Prince and Savior of all people should both be prophesied of, and be born, it was the duty of the saints to use this good, marriage, not as to be sought for its own sake, but necessary for the sake of something else: but now whereas . . . there is on all sides from all nations an overwhelming fullness of spiritual kindred, even they who wish to contract marriage only for the sake of children are to be admonished that they use rather the larger good of continence.

He adds, further, in the same treatise that what food is to the conservation of man, the gratification of passion is to the continuance of the race. Regarding barrenness he says: "When married persons know that they shall not have children, yet it is not lawful for them to separate even for the sake of children and to join themselves to others;" which is in contrast with the practice of the Spartans and Romans. He remarks, further, that "Marriage itself, indeed, in all countries is for the same cause of begetting sons, and of what character soever they may be afterwards, yet for this purpose was marriage instituted;" which statement is probably partly based on the *liberorum quaesundum causa*, as well as on Biblical tradition. His conclusion is that "Marriage is a good and may be defended by sound reason against all calumnies." The following reminds one of Tolstoi: "But I am aware of some that murmur, 'What if all men should abstain from sexual relations, whence will the human race subsist?' . . . I answer, much more speedily would the City of God be filled and the end of the world hastened." ¹

¹ *On the Good of Marriage*, chap. x.

In general, Augustine is of the same opinion as Saint Paul, to whose writings he frequently refers. He says that mothers can find compensation for the loss of virginity by bringing up their children into virginity. "Mary had both virginity and fruitfulness: . . . for what is wanting to you [virgins], let your virginity, that hath been preserved, be a consolation; for others, let the gain of children make up (in a measure) for lost virtue."¹ But still "no fruitfulness of the flesh can be compared to holy virginity."²

Chrysostom lays stress on the quotation from the *First Epistle to Timothy*, to the effect that woman should be saved through child-bearing,³ and his whole discussion is based on the relation of sex to the welfare of the soul. Woman, he says, will be saved "if she continue in faith and charity and holiness with sobriety." But again, virgins are to be held in the highest estimation.

In his treatise *On Virginity*, Gregory of Nyssa treats the subject in the usual moral and ecclesiastical manner. The fundamental idea embodied in the treatise is briefly this: The spirit must be freed, in order to be drawn to the Divine Being; to be so freed, a virginity of body and soul is necessary. In theory his idea of virginity is disinterestedness in the world, and by means not necessarily the same as celibacy. In the world as it is, however, this is usually the only practical solution. Like all the Fathers, he saw in celibacy a visible imitation of Christ, and sought in it to put away forever all secular distractions and dissipations. He goes further than Athanasius in this and gives us a most dismal picture of the woes of married life and

¹ *On the Good of Marriage*, chap. vii.

² *On Holy Virginity*, vol. iii, p. 419, *Post-Nicene Fathers* (first series).

³ *I Timothy*, ii, 11-15; Chrysostom, *Homily ix, On Timothy*.

of the disappointments incidental to the rearing of children. Though he does not blame the marriage state itself, his views are, in fact, very unfavorable to it and to propagation.¹

Jerome differs from his predecessors in little but in mode of expression. He says: "I do not detract from marriage when I set virginity before it. No one compares a bad thing with a good. Wedded women may congratulate themselves that they are next to virgins. . . . He who desires to replenish the earth may increase and multiply if he will." He believes that God's command is one which has been fulfilled in its original intent, so that it is not necessary to regard it; it is better instead to have regard for increasing our spiritual well-being. He also speaks of the diversions of the married woman and the great inconveniences involved.²

Gregory Nazianzus says that "a man can have no fairer prize than a good wife, nor a worse one than her opposite."³ But he adds, of the married and unmarried states, "the latter is higher and more divine and more difficult, while the former is more humble and more safe." In his treatise *On the Gospel*, he says that marriage is, nevertheless, a good and really necessary thing, "for there would be no celibate if there were no marriage."

Cyril's views are simply echoes of those expressed by others. He urges the excellence of virginity and the fact that its purpose is to honor purity. Marriage is not to be despised, for it is permissible for all, and indeed advisable for many and necessary for others. It is a good but troubled state.⁴

¹ Chap. iii.

² Letter xxii, section 19.

³ *On the Death of his Father*.

⁴ Lecture xii.

Basil writes of the beauties of virginity, the evils of unchecked passion, and the duties and laws of marriage.¹

Ambrose says that

not only has the apostle laid down this rule concerning a bishop or priest, but the Fathers in the Nicene Council added that no one who has contracted a second marriage ought to be admitted among the clergy at all. For how can he comfort or honor a widow or exhort her to preserve her widowhood and the faith pledged to her husband, which he himself has not kept in regard to his former marriage?²

He likens virgins to angels, and urges parents to train their children to virginity, and he sets before them the troubles arising from their desire to have grandchildren. Still he defends marriage "against heretics who oppose it."³

In his *Ecclesiastical History*, Hermias Sozomen takes it upon himself to defend monasticism against those who were opposed to the absorbing and, as they regarded it, the destructive character of this manner of life. Like nearly all his contemporaries in the Church, he supported its virtues. He is a full believer in the philosophy which nurtured him, and its attempts to enthrone the spiritual over the material find in him a most zealous supporter.

In referring to Constantine, Sozomen speaks of an ancient law (the *Lex Julia*) by which those who were unmarried and childless suffered disabilities; the object of which law had been to increase the number of people. "The emperor," he continues,

perceiving that this enactment militated against the interests of

¹ *Letter to a Fallen Virgin*, and Letter cxcix, *To Amphilochius concerning the Canons*.

² Letter lxiii.

³ *Concerning Virgins*, chaps. vii, ix.

those who remained in a state of celibacy and childless for the sake of God and deeming it absurd to attempt the multiplication of the human species by the care and zeal of man (since nature always receives increase or decrease according to the fiat from on high), made a law enjoining that the unmarried and childless should have the same advantages as the married. He even bestowed peculiar privileges on those who embraced a life of continence and virginity.¹

In a similar ecclesiastical history, Socrates speaks of a discussion concerning the advisability of bishops having conjugal relations with their wives whom they had married while laymen, and argues: "All men cannot bear the practice of rigid continence; neither, perhaps, would the chastity of the wife be preserved."²

Passing to a writer of the sixth century, Dionysius Exiguus, we find him in agreement with those of the earlier periods. He maintains that man should not yield to the strength of his passions, which, though natural, are to be subdued and used solely for purposes of procreation. If a man's passions are not bent to his will by wisdom, he resembles the beasts, who act according to their instinctive desires alone.³ He reverts to the divine command, *crescite et multiplicamini et implete terram*, and declares that it has been fulfilled and men now, consequently, live without marrying and begetting children. It is now, indeed, better not to marry.⁴

¹ Bk. i, chap. xii, especially.

² Bk. i, chap. xi.

³ *Libri de Creatione Hominis*, cap. xix: "Ea namque quibus brutorum vitam ad conservationem sui munita est, ad hominis translata conservationem, passionum initia facta sunt. Furore namque conservantur bestię, quę carne viscuntur; quaecumque vero lasciva sunt, genus suum propagatione multiplicant."

⁴ *Ibid.*, chap. xxiii. Found in *Traditio Catholica*, vol. i, pp. 378 *et seq.*

Gregory the Great's opinions do not seem tinged with such strong asceticism as those of many of his predecessors. He is careful not to despise married people, but advises them to remember their spiritual life and not let it be hidden because of their temporal blessings. Husbands and wives, he says, are to be admonished that they are joined together for the sake of producing offspring, and he warns them against taking undue advantage of their marital privileges.¹

(c) *Saint Thomas Aquinas*. The considerable literature written by clerics of the later centuries of the Middle Ages shows in all essential details a thorough agreement with the opinions of the Fathers of the periods preceding and following the Nicene Council, and for this reason it would be a thankless task to carry the investigation further in this particular. But the writings of Saint Thomas deserve some attention here.

Saint Thomas saw that numerous families could contribute to the strength of a state, and considered it well for the government to bear this in mind.² The fact that he takes a broader and in certain respects a more intelligent view of such a matter seems due at least partly to the influence of Aristotle. But, of course, he did not let this conflict with his ideas concerning celibacy. Certain men must be celibates, for the sake of the general welfare, as well as for religious purposes. The multiplication of the species is a duty of the multitude and not of the individual, said he. It suffices when some take on themselves this care; it is not necessary for all. The race must not only preserve itself, but it must develop spiritually

¹ *Pastoral Life*, chap. xxvii.

² *De Regimine Principum*, lib. iv, cap. ix: "Quæ familia plus multiplicatur, in prolem, amplius cedit ad firmamentum politiæ."

as well as physically. It is then proper and conducive to the general interest when a part of the members of society assures the perpetuity of the race, while another, abstaining from sensual pleasures, gives itself to the furthering of the spiritual good of all. Celibacy is the better condition for those who would elevate their spirit to the love and contemplation of things spiritual and divine. This division of vocations is then in accord with the best social interest and with Providence.

Regarding the celibacy of the apostles and Christ's position, he admits that celibacy was an innovation on the rules of the primitive Church, which he endeavors to explain by the superior sanctity of the early Christians, rendering them superior to the asceticism requisite to the demands of purity in more degenerate ages. He remarks that Christ required no separation between Peter and his wife.¹ His position was, however, in agreement with the teachings of the mediæval Church.²

Aquinas's discussion of sexual relations is partly of quasi-physiological character, not unlike that of Augustine, as well as theological in its fundamental point of view. He refers, for example, to the active and passive elements in procreation, and the differences between some plants and animals and man in this respect. The more complicated development of sexual functions in man as compared with

¹ *Summa Theologica*, ii, Quaestio 186, art. 4, sec. 3: "et ideo Petrum quem invenit matrimonio junctum, non separavit ab uxore; Joannem tamen volentem nubere a nuptiis revocavit."

² *Ibid.*: "Nec tamen quia antiqui patres perfectionem animi simul cum divitiis et matrimonio habuerunt, quod ad magnitudinem virtutis pertinebat, propter hoc inferiores quique debent praesumere se tantæ esse virtutis ut cum divitiis et matrimonio possunt ad perfectionem pervenire. . . . Nam illi patres si tempus fuisset continentiae et paupertatis servandæ studiosius hoc implessent."

the lower animals is due, he thinks, to the higher purpose for which man is destined by God's will. The differentiation in sex is not only natural, but is so ordained by the Creator for the express purpose of generation and the continuance of the race.¹ Finally, he says, it is as a result of original sin that conception must now take place at the cost of virginity.

The treatment which Saint Thomas accords this subject is *in toto* simply an attempt to point out the connection of ethics and Christian theology with procreation.

§ 3. *The Formal Regulations of the Church Concerning Marriage and Celibacy.* The late Professor Schaff, in his *History of the Christian Church*,² says that mediæval Christianity is not a direct continuation of the Ante-Nicene Christianity in conflict with the heathen world, but of the Post-Nicene Christianity in friendly union with nominally Christian states. This fact has an important bearing on the greater stringency of celibate regulations and the development of monastic ideals and practices. To a very great extent, the Church was seconded in its efforts to emphasize the importance of celibacy by the power of the secular state from the time of Constantine, and down through the Middle Ages. Whether it is an exaggeration

¹*Summa Theologica*, ii, Quaestio xcii, art. i: "Necessarium fuit feminam fieri, sicut Scriptura dicit, in adiutorium viri; non quidem in adiutorium alicujus alterius operis, ut quidam dixerunt, cum ad quod libet aliud opus convenientius juvari possit vir per alium virum quam per mulierem sed in adiutorium generationis." See also Quaestio cxviii, art. ii, and Quaestio cxix, art. ii. In general, cf. Karl Werner, *Der heilige Thomas von Aquino*, pp. 455 *et seq.*; Victor Brants, *Esquisse des Théories Économiques aux xiii^e et xiv^e Siècles*, pp. 237, 238; Lucien Schöne, *op. cit.*; Kautz, *Die Geschichte der Entwicklung der National-Oekonomie in der Literatur*, pp. 212 *et seq.*

²Vol. iv, pp. 374, 375.

to say, as does Dr. A. C. Coxe,¹ that "the conversion of Constantine introduced the most marvelous revolution in human empire, in practical thought and in the laws and manners of mankind ever known in the history of the world," or not, it is undoubtedly true that this event was one which in many respects marks an epoch in the history of civilization.

In the regulations adopted by the Seven Ecumenical Councils and in smaller synodal conventions we find detailed regulations touching nearly every phase of sexual relations, both inside and outside of marriage, some of which apply also to offspring. We shall refer to a few only. Wherever these matters are mentioned it is always noticeable that a far greater stringency was deemed necessary for the clergy than for laymen.²

The Ancyran Council of 314 A. D. forbids presbyters and deacons sexual indulgence.³ The Council of Neo-caesarea (between 315 and 325 A. D.) ruled that "If a presbyter marries he shall be deposed from his order; if he commits fornication or adultery, let him be expelled and be put to penance." A woman who marries two brothers is to be disciplined, and punishments are provided for adultery, *etc.*, and consecrated virgins are strictly forbidden to marry.⁴ After the Council of Nicea, the Greek as well as the Latin Church accepted the principle that whoever had taken holy orders before marriage should not be married afterwards. The Council of Nicea is quite explicit in regard to the character of women whom clerics

¹ *Ante-Nicene Fathers*, vol. vii, preface to Lactantius.

² In general, *cf. Nicene and Post-Nicene Fathers*, vol. xiv.

³ *Traditio Catholica*, Tomus Unus (Dionysius), Canon xxxiv: "Hi qui in clero sunt presbyteri, vel diaconi et a carnibus abstinent."

⁴ Canon xxxiv of Basil and canon xvi of Council of Chalcedon.

might have as housekeepers (*mulieres subintroductae*).¹ But the Council of Gangra defends marriage: "If any one of those who are living a virgin life for the Lord's sake shall treat arrogantly the married, let him be anathema."² Monks and virgins are prohibited from marrying by the Council of Chalcedon, indicating that the contrary had been practiced to some extent.³ The Quinisext Council of Trullo (692 A. D.) placed more extensive restrictions on the marriage of clerics. But as John Fulton says: "Marriage was no impediment to ordination in the Church of the East, even as a bishop, and bishops, priests and deacons, equally with other men, were forbidden to put away their wives under pretext of religion;"⁴ that is, the marriage of clerics was forbidden but a married clergy was tolerated.⁵ At the Council of the Lateran (1139 A. D.), Innocent II declared that marriages of clerics were not true marriages; a similar rule had been made by the Emperor Justinian in the year 530. Innocent also declared that the children of such unions were spurious (*spurii*). The Church was always careful to maintain the position taken by Saint Paul and the early Fathers that the virgin

¹ Canon xx (Dionysius): "Vetuit omnino magna synodus, nec liceat episcopo, nec presbytero, nec diacono, nec ulli penitus eorum qui sunt in clero, extraneam (subintroductam) habere mulierem: nisi forte aut matrem, aut sororem, vel eas tantum personas quæ omnem suspicionem effugiunt."

² Canon lxix, *ibid.*: "Si quis virginitatem servans propter Dominum se supra conjugatos extollat, anathema sit."

³ Canon cxciv, *ibid.*: "Virginem quæ se Deo Domino dedicavit, similiter monachos, non licere matrimonio conjungi." The Council of Gangra was convened between 325 and 381 and the Council of Chalcedon 450 A. D.

⁴ *Index Canonum*, p. 29.

⁵ For a tolerably full discussion see *Nicene and Post-Nicene Fathers*, vol. xiv, pp. 365 *et seq.*

and celibate state was one of greater sanctity than that of marriage. This is repeated expressly in a canon of the Council of Trent (1542, 1545, 1563).¹

In the so-called Penitential Books of the eighth and ninth centuries, compiled by bishops and others, we find many passages regulating morals generally, and sexual relations in particular. "Almost every diocese," says Professor Schaff,² "had its own penitential book, but the spirit and the material were substantially the same in all." These books had, through the power of the clergy, undoubtedly a great influence on the people, and particularly in their conjugal and moral life. Restraint of passion and desire was thus directly inculcated.³

"The position of the Canon Law in regard to the cure of souls was very firmly maintained in mediæval Europe," says Guy Carleton,⁴ "and here the most important part of the law was the law of matrimony, which in many countries is still intimately connected with Canon Law."⁵ The Church claimed jurisdiction over all such matters on the ground that marriage was one of the "seven sacraments."

¹ Concilium Tridentum, sessio xxiv, canon x: "Si quis dixerit, statum conjugalem anteponendum esse statui virginitatis vel coelibatus, et non esse melius et beatius manere in virginitate vel coelibatu, quam jungi matrimonio, anathema sit." Cf. also *Catech. Rom. ex decretis Concilii Tridenti*, pars ii, caput viii, de sacramento matrimonii, 13: "Atque una etiam haec causa fuit, cur deus ab initio matrimonium instituterit. Quaere sit, ut illorum sit scelus gravissimum, qui matrimonii juncti, medicamentis vel conceptum impediunt, vel partum abigunt: haec enim homicidarum impia conspiratio existimanda est."

² *History of the Christian Church*, vol. iv, pp. 374-375.

³ In *The Ancient Laws and Institutes of England from the Seventh to the Tenth Century*, and in many other similar collections, the influence of the Church's teaching is clearly apparent also.

⁴ *Historical Jurisprudence*, sec. iv, chap. xii, Canon Law.

⁵ Cf. Vogt, *Kirchen und Eherecht der Katoliken und Evangelischen etc.*, contents.

It was held to be connected in all essential details with divine revelation, and as the Church in principle has ever taken a standpoint against sin, it was particularly prompt in regulating those matters which might lead to carnal sins. "The result was an elaborate system, which is remarkable for its keen insight into sexual relations, while it is also repellant by its extreme particularity."¹ In case one of the parties to a marriage was guilty of gross violations of its privileges, no divorce *a vinculo* was allowed; but there might be a legal separation *a mensa et thoro*, which, however, did not include the right of either party to remarry. But, as in existing law very generally, the prohibition of divorce did not preclude the dissolution of such relations as were, in the guise of marriage, legally void from the beginning, on account of some defect in the act by which such unions were to have been established, or because of other impediments. In Canon Law, as in the decrees of the Councils, which formed its basis to such a large extent, marriage was prohibited to certain orders, and it was controlled in the case of all. Impediments consisted in consanguinity and affinity of the parties, religious vows or differences, and sin or crime, such as adultery, the ground for these resting on Mosaic prescriptions and more strictly Christian doctrines.²

In modern times the influence of the *Corpus Juris Canonici* is still apparent, especially in its provisions relating to marriage. This is particularly true, of course, in countries whose religious life is dominated by the See of Rome, "but even in England and in the United States the common law of marriage is directly derived from the Canon Law."³

¹ Carleton, *ibid.*

² See *Leviticus*, chap. xviii and *Deuteronomy*, chap. xxvii.

³ Carleton, *op. cit.*

In his *Principles of Economics*,¹ Marshall remarks that

in England as elsewhere the religious orders were a refuge for those for whom no establishment could be provided; and religious celibacy, while acting in some measure as an independent check on the growth of population is in the main to be regarded rather as a method in which the broad, natural forces tending to restrain population expressed themselves, than as an addition to them.

Francesco Nitti says, and we believe with some truth, that "among all the religions of civilized people, Catholicism is the least favorable to fecundity."²

Opinions regarding the general efficacy of the policy of the Church with reference to sexual problems seem to vary according to the religious standpoint of the writer. Few are able to rise to a higher level.

Henry T. Finck comments on the matter in the following bitter and certainly unjust way:

The pathologic attitude of the mediæval mind was at first a natural reaction against the incredible depravity and licentiousness that prevailed under the Roman Empire. But the reaction went to such preposterous extremes that the resulting state of affairs was even more degrading and deplorable than the original evil. It was like inoculating a man with leprosy to cure him of small-pox. It was bad enough to treat marriage as a farce, as did the later Romans among whom there were women who had their eighth or tenth husband, while one case is related of a woman who was married to her twenty-third husband, she herself being his twenty-first wife;³ while the public looked on this as a match in a double sense, the survivor being crowned and feted as champion. But a thousand

¹ P. 263, fourth edition.

² *Op. cit.*, p. 123.

³ Seneca, *De Beneficiis*, iii, 16.

times worse was the mediæval notion that marriage was a crime. And this preposterous notion . . . was foisted on the world by this fanatical priesthood in whose hands Christianity was unfortunately placed for centuries to be distorted, vitiated and utilized for political, criminal and selfish purposes.¹

Finck's statement is clearly based on but limited knowledge and deep prejudice; it is at least in some details untrue or exaggerated. The Church never declared marriage a crime, nor did any of its followers. From a certain standpoint its position is easily defensible. In fact, it is the writer's belief that Finck and similar modern writers show in their own way a more unreasonable fanaticism than the Church's most devoted followers. It is true, however, as Lecky says,² that the Roman, the late Egyptian and other forms of asceticism were exaggerated by the Montanists, the Novatians, the Gnostics and Manicheans, as well as the Docetae, on the outskirts of, but not among the true followers of, the Church of Rome. Not one of the influential writers of the Church advocated such extreme doctrines as is sometimes charged.

Max Nordau gives expression to his opinion on the subject, and it is, perhaps, as unprejudiced and in general as correct a concise statement as can well be found. He says:

When early Christianity condemned sexual love it destroyed its own work, it sentenced mankind to annihilation . . . The doctrine of love for one's neighbor conquered humanity, because it appealed to its most powerful instinct, the impulse for the preservation of the race. The doctrine of celibacy on the contrary would have prevented the spread of the new religion completely, if it had not been for the fact that

¹ *Romantic Love and Personal Beauty*, pp. 92-93.

² *Op. cit.*, p. 109.

it appeared at a time when society was thoroughly corrupt, when licentious egoism alone was ruling supreme, and the relations of the sexes, diverted from their purpose of reproducing the species, had become degraded into all sorts of selfish enjoyment alone . . . so that it seemed an abomination to the conscience of the good . . . When Christianity was no longer the reaction from the moral corruption of ancient Rome, . . . the dismal doctrine of celibacy was forced into the background.¹

Among the most devoted defenders of the restraint taught by the Church we find the Vicomte Alban de Villeneuve-Bargemont. "Catholicism," he says, "far from exciting imprudently the principle of population, on the contrary moderates and regulates it. . . . In the beginning of the world," he continues, following the arguments of the Fathers of the early Church,

the Creator said to man and woman in blessing them, "Increase and multiply." But later, the new law, appropriate to a society already formed, counselled abstinence from marriage as more advantageous, and Saint Paul seems to address himself to the poor of our own day when he speaks those words so full of meaning, that persons who marry imprudently shall suffer afflictions and evils, "but I would spare you." These words of him whom the Catholic Church calls the great apostle and which are at the foundation of both civil and religious institutions, wherever in Europe the church has been influential, are above the need of apology.²

¹ *The Conventional Lies of Our Civilization*, p. 299. Cf. *Degeneration*, *passim*, and D. S. Jordan, *The Blood of the Nation*, pp. 33-34 *et passim*.

² "Si l'on approfondit les causes du célibat des prêtres et des ordres religieux, et l'origine des honneurs qu'il rend à la virginité et à la continence (abstraction faite du rapport religieux et du mérite d'une vie de sainteté, des preuves et des sacrifices recommandés aux Chrétiens), on y

Another defense of the Catholic position, which Roscher styles "remarkable but unsuccessful,"¹ is found in Charles Périn's *De la Richesse dans les Sociétés Chrétiennes*.² Says Périn:

Catholic morals and institutions give to the problem of population the only solution which offers society prosperity, strength and permanence, by regulating the development of all natural and legitimate tendencies. Chastity in all conditions of life is made a rigorous obligation. It is by preaching chastity in marriage as well as in celibacy that the Catholic Church assures the fecundity of races, while she would restrain their expansion within proper limits . . . Absolute continence in marriage the church regards as perfection; but the church knows the weakness of human nature and attempts to control it in a practical manner . . . The Church inculcates also a respect for human life by its spirit of charity toward the weak, and thus too it assures the preservation of infants resulting from fruitful unions, legitimate and illegitimate. It is through the influence of Catholic morality that infanticide, *etc.*, permitted in the pagan cities of antiquity has become a crime.

It is true that the ideals of the Church were often far removed from its practices. Mediæval celibacy was too often rather immoral than moral; but this was simply an evidence of what, in the language of the Fathers, was the "frailty of the flesh." With all these shortcomings ad-

trouvera une haute pensée d'ordre social et une rare et sublime prévoyance de l'avenir. . . . Que deviennent donc les allégations des philosophes modernes et des économistes de l'école anglaise qui tantôt s'élèvent contre le célibat des prêtres et des institutions qui exigeaient des vœux de chasteté perpétuelle, tantôt reprochent au clergé catholique d'encourager imprudemment des mariages et la population?" *Économie Politique Chrétienne, Du Célibat*.

¹ *Political Economy* (Lalor), vol. ii, p. 345.

² Vol. i, chap. iv.

mitted, however, it seems that there can be no doubt that the restraint of desire always inculcated was closely allied to a more worldly prudence and forethought, and that this phase of the teachings of the Church is at least partly "to be regarded as a method in which the broad natural forces tending to restrain population expressed themselves."¹

¹ Marshall, *loc. cit.* See also Luigi Cibrario, *Della Economia Politica del Medio Evo*, fifth Italian edition, vol. ii, pp. 45-57; Joseph Rambaud, *Histoire des Doctrines Économiques*; Thomas Sanchez, *Disputationes de Sancto Matrimonii Sacramento*, lib. iv; Henry Lea, *History of Christian Celibacy*; Lecky, *History of European Morals*, index; Guerrier de Dumast, *Origine de tous nos Périls*; Garnier, *Du Principe de Population*, p. 323; F. Laurent, *Études sur l'Histoire de l'Humanité*, vol. iv, pp. 191-214.

CHAPTER III

FIRST MODERN VIEWS: FROM THE BEGINNING OF THE SIXTEENTH TO THE MIDDLE OF THE SEVEN- TEENTH CENTURY

§ 1. *General View of the Period.* The aim of the writer in this and the following chapters is to present a review of modern doctrines and theories which have a bearing on population. These are expressed mainly by the theologians and philosophers and by the political and sociological writers. The acts of statesmen and the laws of kings and parliaments and the calculations of early statisticians are treated only as they throw light on the mental attitude of the period. Marriage and morals, health and poverty, emigration and regulation are considered only in their relation, more or less direct, to current opinion concerning problems of population.¹

The sixteenth century is one of awakening. The opening of the Orient after the Crusades, the discovery of new routes to India and America, the inventions of powder and printing, the revival of letters and philosophic speculation had all been instrumental in broadening the national as well as the individual horizon. Art and science, trade and manufacturing received a new impetus.

¹ Cf. Schmoller, *Zur Geschichte der national-ökonomischen Ansichten in Deutschland während der Reformations-Periode*, in *Zeitschrift für die gesamte Staatswissenschaften*, 1860, pp. 668 *et seq.*, pp. 692-712 *et seq.*; also Wiskemann, *Darstellung der in Deutschland zur Zeit der Reformation herrschenden national-ökonomischen Ansichten*, pp. 3-46, 88, *et passim*.

But beneath the surface of this new and glorious exterior we find great and growing evils, affecting the general well-being of the people. The wealth and luxury of cities, the great profits of merchants and princes gained through an extensive system of monopolies, the pomp and ceremony of the Church with its vast array of monks and nuns, contrasted sharply with the misery of the peasants and the lowest classes in the cities. And these circumstances naturally left their impress upon the writings of the period.¹

The economic views of the sixteenth century do not show any great advance over mediæval conceptions. The religious and moral point of view still prevailed largely. The communistic tendencies, encouraged by religion, appear in the favorable reception of such a work as More's *Utopia*; but the uprisings of peasants in England and Germany exercised little direct influence upon later economic thought. Opinions on population are based on theological foundations even among those whose political views were revolutionary. While Catholicism still firmly maintained its asceticism, defending chastity in its extreme form of celibacy and regarding marriage as a pardonable human frailty and necessity, we see the Reformers condemning, also on theological grounds, celibacy as physiologically and morally wrong and commending marriage. Both the Catholic and the Protestant side regard the matter of population and subsistence as one regulated by a wise and benevolent Deity. Not the least significance of the Reformation was its demand for a more satisfactory solution of the sexual problem.²

¹ Cf. Cunningham, *The Growth of English Industry and Commerce*, vol. i, pp. 345 *et seq.*

² Jolles, *Die Ansichten der deutschen national-ökonomischen Schriftsteller des 16 und 17 Jahrhunderts über Bevölkerung* (Conrad's *Jahrbücher*, 1886), p. 194 *et seq.*

§ 2. *The First Group.* Egidio Colonna (1247?-1316) wrote his work entitled *Li Livres du Gouvernement des Rois* before the period here considered, but it was not published until 1473. In the discussion on wife and children in the first part of the second book he presents an essentially non-economic view. He is not ascetic, however, and says that a man should have a wife and children, for this is natural. He advocates monogamy. To marry too early is imprudent and likely to be injurious to the children to be born and to impair the mutual happiness of the married. All children should be well cared for.

Franciscus Patricius, the bishop of Sienna (1529-1597), and one of the foremost of the leaders in the later humanistic movements, expresses fears of over-population and shows some insight into the relations of population to the means of subsistence.¹ He would restrict the right of citizenship of foreigners resident in the country to a limited few, and in general all encouragement of immigration was to be avoided. He speaks of the advantages of locating cities on navigable rivers or near their mouths. The land near rivers is almost always the most productive, and cities so situated could carry on commerce to greater advantage. Commerce and productive soil are the two great means of providing the necessities for large populations, which were to be desired as long as all could be provided for. This, however, was difficult. Cities also have disadvantages. Their large populations often consist of ignorant masses, who are likely to discuss dangerous matters and raise disturbances.² His attitude and some of his remarks bear the mark of Greek influence.

¹ *De Institutione Reipublicæ*, lib. vii, 12: "incolarum siquidem multitudo periculosa est in omni populo."

² *Op. cit.*, lib. vi, tit. iv; lib. vii, tit. xii; cf. Roscher, *Geschichte der National-Oekonomie in Deutschland*, pp. 141-142.

The question as to whether celibacy might not compromise the preservation of the race was considered in the *Songe du Vergier* (*Somnium Viridarii*), whose author seems to have been Raoul des Presles (1514-1583). The treatment is in the form of a discussion between a cleric and a soldier. The soldier takes the position that the practice of the Church is detrimental, and the cleric in defending it employs the following line of argument: Humanity is to-day of sufficient numbers to make social life symmetrical, and the abstention of some from procreation cannot imperil its future. Virtue consists in the golden mean and in determining according to reason what this may be under given circumstances. When the race was in its infancy sound reason counselled against celibacy; and, by the same token, when the race had so increased that the earth could not well nourish more, reason and nature counselled continence. In practically all modern states the last condition has been reached; hence restraint in the forms of celibacy and continence is not only permitted but is very commendable indeed. For the comfortable preservation of mankind one cannot advise celibacy alone nor unrestrained procreation.¹

¹“Et hoc specialiter debet concedi in hominum multitudine, natura enim facit de possibilibus quod melius est: et non habundat in superfluis nec deficit in necessariis. Constat autem quod humanæ naturæ propter complexionis subtilitatem et operum sibi debitorum multitudinem et per consequens organorum corporalium diversitatem tot ac tantæ sunt indigentia, quos natura non suppleuit, sed rationem, quam dedit homini ut suppleret, reliquit quod unus homo vel duo aut centum vel pauci non sufficerent ad hanc replendam indigentiam. Pluribus enim indigentibus indigemus, quorum artifices adinuicem permittentes pro suis operibus aliorum; propter quod concludi potest, quod sicut in toto mundo, sicut si erat in primaeva constitutione mundi sive in aliquo climate non esset hominum multitudo sufficiens ad indigentias supplendas regula natura et recta ratio non prohibent abstinendum ab actu venereo: et virginitatem prohibent seu inibent. Quia nihil eorum quæ præter naturam

Niccolo Macchiavelli (1469-1527) is perhaps the first to express ideas of modern tone on population. Kautz places him first among the mercantile writers of Italy;¹ and in his views on population his nationalist bent is as apparent as in his general treatment of political subjects. In *The Prince*² he says: "I think those princes capable of ruling who are capable, either by the numbers of their men or by the greatness of their wealth, to raise a complete army and bid battle to any enemy that shall invade them." But Macchiavelli has not given himself to that one-sidedness so characteristic of later mercantilist writers. He teaches,

sunt, est bonum et sic bene infertur quod velle frangere integritatem corporis antequam sit opportunum . . . tene unum extremum vituperabile. Nolle etiam frangere pro necessitate humani generis solvanda et multiplicanda tempore defectus, tenet aliud extremum similiter nolle frangere et frangere velle cum circumstantiis debitis tenet mediatatem quæ est virtus moralis. . . . *Posset et esse tanta multitudo*, quod si ulterius exerceat, terra non esset sufficiens ministrare cibum hominibus, propter quod illo tempore naturæ vis et ordo permetteret imo iuberet continere. . . . Hic attendendum, quod loquendo de jure positivo etiam antiquissimo non procedunt illa quæ dicta sunt. Sed loquenda de jure naturale, primaevò corruptam naturam humanam per peccatum primorum parentum procedere possent: quia ex illo antiquo jure nullus coitus fuit damnatus. Sed postea humano genere multiplicatio supervenit damnatio et approbatio. Stat tamen quo lex positiva civilis approbat concubinatus, et ex hoc non accedit ad naturam veræ prudentiæ humanæ etiam lege divina circumscripta: quod pater ex supra demonstratis. Nam ex dictamine rectæ rationis unus homo debet jungi uni mulieri indivisibiliter non pluribus: hæc autem est conjunctis matrimonialis, non concubinativa. Lex ergo canonica concubinalem reprobans, et solam matrimonialem conjunctionem approbans, accedit ad veram prudentiam humanam: et etiam circumscripta lege divina." Excerpts from chapters 298-300. The above *posset et esse, etc.*, and the references to *prudentia humana* are among the very first modern indications of Malthusianism. Goldast (*Monarchia*, vol. ii) attributes this *Somnium Viridiarii Consiliaria regia de jurisdictione regia et Sacerdotati* to Philotheus Achillo; but cf. Brants, *op cit.*, p. 242 and Ad. Franck, *Réformateurs et Publicistes*, vol. i, pp. 209 *et seq.*

¹ *Op. cit.*, p. 264.

² Chap. v.

for example, that agriculture as well as industry and trade contribute to a nation's wealth and welfare.¹ He urges a more intensive cultivation of land, and seems to see that trade is able to contribute to peace between nations.² He commends diligence and frugality as the best means of avoiding economic disaster. He would reduce the large standing armies, for they are often the means of a nation's impoverishment.

In his *History of Florence*, Macchiavelli seems to realize that a population may increase beyond the capacity of a limited territory to support it.

The people who inhabited the northern parts beyond the Rhine and the Danube, living in a healthy and prolific region, frequently increased to such vast multitudes that a part of them were compelled to abandon their native soil and seek a habitation in other countries. The method adopted, when one of these provinces had to be relieved of its superabundant population, was to divide into three parts, each containing an equal number of nobles and people, of rich and poor. The third upon whom the lot fell then went in search of new abodes, leaving the remaining two-thirds in possession of their native country . . . The migrating masses destroyed the Roman Empire.³

He remarks elsewhere that an excessive population will be diminished by want and diseases,⁴ being thus one of the first of those who are more strictly precursors of writers like Malthus.

In several parts of his *Utopia*, Sir Thomas More (1478-1535) refers to problems incident to marriage and pro-

¹ *Discorsi*, ii, 2.

² *Ibid.*, i, 55.

³ Bk. i, chap. i. Cf. Gibbon, *History of the Rise and Fall of the Roman Empire*, vol. i, chap. ix, who says that Macchiavelli derived this description from Paul Diaconus.

⁴ *Discorsi*, ii, 2, 5. Cf. Malthus's *Essay* (third edition), pp. 123, 124.

creation.¹ The influence of Plato is not least apparent here. The cities of the Utopians are composed of families which are small groups of persons nearly related to one another. A very important matter of concern in these cities is that they be kept from increasing "above measure," and in this connection he says:

Lest any city should become either too great or by any accident be dispeopled, provision is made that none of their cities may contain more than six thousand persons besides those of the country round. No family may have less than ten nor more than sixteen children, but there can be no determined numbers of children under age. This rule is easily observed by removing some of a more fruitful couple to any other family that does not so much abound in them. By the same rule they supply cities that do not increase so fast from others that breed faster; and if there is any increase over the whole island they draw out a number of their citizens from the several towns, and send them over to a neighboring continent, where . . . they fix a colony . . . Such care is taken of the soil that it becomes fruitful enough to supply provisions for all, though it might otherwise be too narrow and barren.

More here indicates the restriction which want places on increase, and of exceptional causes of depopulation he mentions "great pestilent plagues." He continues that

if any accident has so lessened the number of inhabitants of any of their towns that it cannot be made up from other towns of the island, without diminishing them too much . . . the loss is to be then supplied by recalling as many as are wanted from the colonies.²

¹ See especially chapters on "Their Living and Mutual Conversation, Their Traffic," "Their Trades and Manner of Life," and on "Their Slaves" and "Marriage."

² Quoted from Morley's *Ideal Commonwealths*.

More shows some appreciation of "positive checks" to increase. His remedies for too great populations indicate however, that his view was limited and of classical origin.

In regard to marriage he says that women are not to be married before they are eighteen and men not before they are twenty-two years of age. He advocates great care in the choosing of mates; and for the welfare of the individual as well as society all unchastity should be severely punished.

§ 3. *The German Reformation.* The most significant literary contribution to this movement in its relation to marriage is that of Luther's (1483-1546) *Sermons*.¹ He breaks away from the doctrines of the Church, and both in deed and in writing protests against the celibacy of the priesthood. He says that no man is able to live virtuously without a wife unless he is naturally or artificially impotent. Not one in a thousand, he says, is an exception. Some may think that marriage would be desirable, but hesitate, asking themselves the question, "How shall I provide for a family? I have nothing; how can I take a wife to me and get provision with nothing from which to draw?" This questioning hesitancy is the greatest hindrance to marriage and is the cause of all moral diseases of sex. What shall a man do then? he queries; and his answer is that this is only an indication of a lack of faith in God's goodness.

God has shown how sufficiently he cares for us, when he created heaven and earth, all animals and plants, before he created man. He shows us thus that he will always provide food and shelter sufficient for our needs. It is only necessary that we work and do not remain idle; we shall assuredly to

¹ *Predigten über die Ehe.*

both clothed and fed . . . From all this we draw the conclusion that whoever finds himself unfitted to remain chaste should make arrangements betimes and get some work and then dare, in God's name, to enter into matrimony. A youth should marry not later than his twentieth year, and a maiden when she is between fifteen and eighteen years old. Then they should remain upright and serious and let God provide the way and means by which their children shall be nourished.¹

From the modern point of view such teaching, tending as it would to multiply population without regard to means of subsistence, is opposed to both prudence and sound morality. It is to be borne in mind, however, that Luther's views, like the original Christian aversion to marriage, were the product of circumstances. The Reformation naturally reacted against what in practice had too often become an immoral celibacy. The counter-tendency which Luther represented was fraught with the gravest consequences; and the evils and dangers it entailed were, perhaps, not less serious than those which it was designed to check.²

Two other writers of this time, though not of the same type as Luther, deserve mention. Ulrich von Hutten (1488-1523) ascribed the want prevailing at the time to

¹ Cf. Eberlin von Gunzberg's advice: "Als bald ain megtlein ist XV jar alt, es und ain knab XVIII sol man sy sysammen geben zu der ee, es wöl dann ains williglich keutsch sein.—Jolles, *op. cit.*

² It seems hardly possible to accept Roscher's opinion (*op. cit.*, p. 58) that Luther "wirklich in einer aufstrebenden Zeit lebte, wo das rasche Wachsen des Unterhaltsraumes jede Angst vor Uebervölkerung fern hielt" and that Luther's doctrine is based even partly on a desire to increase population. Contemporary writers like Hutten and Franck von Wörd express fears of too great populousness, a fact which makes Roscher's conjecture improbable.

an excessive populousness and to war.¹ Sebastian Franck von Wörd (1500-1545?) viewed unrestrained increase in population with apprehension. Excessive increase, he thought, was especially to be feared among the Germans, whose very name he connects etymologically with productiveness.² The exceptional fertility of the Germans was particularly noticeable among the Suabians and Bavarians. Even the effects of sanguinary wars and internal disturbances soon disappeared, the gaps being so quickly filled by generation. The only resource which von Wörd, like Macchiavelli and More, conceived for a population which had reached the limit set by natural environment were war and pestilence,³ or emigration.

¹Ulrich de Hutten, equitis Germani, *Ad Principes Germanos ut Bellum Turcis innehant Exhortatoria*, 1518, p. 4: Igitur cui maxima sit comeatus inopia et populosissima, sit hoc tempore Germaniæ quid votis omnibus optandum erat, ut esset foris bellum quo istam exponeremus multitudinem; divinitus accidit (. . .) ut bellandi contra Turcos causa esset et necessitatos esset, etc.

²Germaniæ chronicon von des ganzen Teutschland, p. 89: es wird a germino Germania genent.

³Schwoben und Beyern. Die leuder geben aller welt volck gnug, und ist dannoch allzeit mit solchen überfluss besetzt, dass dārffer und stett zerrinnen wollen, und die gütter und herberg in ein sollich aufschlag kommen, dass kaum höher mag, das ich halte wo nit Gott den Krieg scheidet und ein sterbend drein kompt das wir wider einmal, wie vor etwa durchs los oder anderweg aufgemustert, wie die Zigeuner . . . Nun seind doch allein wie man sagt hundert mal tausent baurñ allenthalb um der auffrur umbkommen, niemand mangelt keins menschen, sonder alle flecken so voller leut das niemand bei in Kan einkommen. Es ist nichts dann kind über kind in ganzem Teutschland, sonderlich in Schwaben, und ist ein wunder wann jemant ein unfruchtbare Schwäben findt. Also das von Teutschen, sonderlich von Schwaben von fremden nationen, so sie drum neiden, ein sprichwort ist entstanden, Schwaben und bös gelt fñrt der Teufel in alle welt. Ist nun die opinion dess hoch erleuchten philosophi Hermetis Tressmegisti war, das kein unfruchtbarer der Kein vatter oder mutter ist oder wird, selig mag werden, so seind die Teutschen vor allen ander Völkern ein gotselig volk.—*Op. cit.*, pp. 89 et seq.

§ 4. *German Writers of the First Part of the Seventeenth Century.* From the Reformation we enter upon the period of the Thirty Years' War, or, more correctly for our purpose, we pass from the theological period into the beginning of the cameralistic, which reaches its climax in the time of Frederick the Great and forms the transition to the modern development of German economic theory. In this period, covering the seventeenth and eighteenth centuries, two general classes of writers are distinguishable: the learned writers, using Latin as their literary medium, and a group writing in the vernacular, popular and practical in aim. To the so-called "learned" writers belong mostly the juristic and philosophical savants following more or less closely Campanella, Macchiavelli and Bodin. The popular group is somewhat later in appearance, and in it the influence of Hobbes and Grotius is often discernible.

In a rather concise and systematic form Jacob Bornitius presents the prevailing doctrine of nearly all writers of the next two centuries in Germany in his *Partitionum Politicarum Libri IV.*¹ A population increases, he says, either by natural growth or by immigration.² Increase, not only of families but of property and territory, is of course to be desired. To encourage increase he recommended various rewards in the form of tax exemptions and special privileges for heads of families, and he would place certain disabilities on married but childless couples, and provide certain punishments and inconveniences for bachelors. He would invite immigration by making agricultural conditions better and improving the facilities for trade and manufacturing and by advertising the good qualities of the

¹First published in Hannover in 1608. See pp. 115 *et seq.*

²"Vel ex sese vel aliunde; intus augetur populus familiarum incrementa."

climate and the favorable opportunities for labor; in fine, he would increase population and encourage immigration by making the country prosperous.¹

The *Monarchia sive Romani Imperii sive Tractatus* of Melchior Goldast (1578-1635) was published three years after appearance of Bornitius's work,² and contains the *Somnium Viridarii* of Raoul des Presles, which has already been treated.

A writer whose work is also representative of a large number of learned political discussions is Hermann Latherus von Husum (1583-1640). His work bears the title *De censu, Tractatus Nomico-Politicus*.³ Calling to his support the authority of Bodin and Botero, he, too, urges the advantages of the greatest possible population. In this connection he comments favorably on the reign of Elizabeth, who had welcomed exiled Protestants to England and in this way had brought great prosperity to the country. This recommendation of encouraging immigration has a general bearing, but it includes also ideas based on religious tolerance as well as of political advantage. His desire to increase the income of the public treasury finds support in his doctrine of population.⁴

In speaking of marriage, Latherus declares himself in favor of rewarding fecundity, a position typical of most followers of Bodin and supporters of the nationalist, mercantilist movement which in nearly all European countries

¹ "Pax publica et privata; virus cultus; Dei et vera religio, quæ ad verum Deum ducit; justitiæ et juris observantia; artium et scientiarum studia et scholæ florentes, in quibus animus excolitur."

² Melchioris Goldasti Waiminsfeldii, *etc.*, Hanoviæ, MDCXI.

³ First published in Frankfurt a. M. in 1618, several editions following.

⁴ "Quis enim rerum omnium ita nescius ignorat, quod multitudine subditorum tributa, census aliaque pensitationes respondeant et copiosam fisco accessionem adiungat."—Cap. vi.

had, by the seventeenth century, grown to great strength. In support of his propositions he refers copiously to classical literature and experience, especially Roman, and includes some quotations concerning the depravity of women, adding, however, by way of consolation, that this should not discourage any one from marrying: we are all sinners. In closing this part of his discussion he eulogizes the *divus Lutherus* and attacks the *caelibes clerus*.¹

Christopher Besold (1577-1638), a learned jurist of this troubled period of German history, entertains similar views in his *Discursus Politicus de Incrementis Imperiorum* ² and in the *Politicorum Libri Duo*,³ and to a small extent in his other works. Hippolytus à Collibus (1561-1637), to whom Besold refers with approval, is of the same school, as is evidenced in a work entitled *Incrementa Urbium sive de Causis Magnitudinis Urbium*.⁴ Besold says that a nation's growth is dependent on its natural resources and industry. Population is multiplied where trade flourishes and the soil is productive and well cultivated, which conditions also always attract foreigners. The state should, therefore, make every effort to insure equity and liberty and salutary conditions generally.⁵ Besold also refers to classical writers, and advocates the Roman practice of rewarding marriage and fecundity and placing disabilities on celibates. No land should be left unoccupied, and if neces-

¹ Lib. iii, sec. 1-2; see also p. 465, and *De Aerario publico*, cap. iii.

² First published in Strassburg, 1623.

³ Frankfurt a. M. 1618.

⁴ Hannover, 1600; cf. Roscher, *op. cit.*, p. 144.

⁵ Lib. ii, cap. viii, sec. 27: "Naturalis Reipublicæ amplicatio est ubi prædominatur natura; quamvis industria accedit; eaque est vel populi multiplicatio vel territorii cultura. Populi multiplicatio, aut fit per civium propagationem," etc. See also chap. i, *De Tribus Domesticæ*.

sary for its best cultivation, foreigners should be encouraged to settle.¹ Luxury and vice in women, as well as in men, is detrimental to increase. Divorce is to be narrowly limited, and second marriages should not be encouraged as should first ones, since they are not so fruitful.

Another German scholar of this period who discusses population is Georg Schönborner von Schönborn (1578-1637). He seems much impressed by the disadvantages of great populations when concentrated in cities. A congested population in a great city, he says, is the cause of confusion and mad uprisings. Roscher believes that this view is characteristic of conditions prevailing before and during the Thirty Years' War, and it is a reflection of those conditions.² Jolles criticizes this view and says that Schönborner's work is mainly a revision of Aristotle's view, and is based, therefore, on the idea of the ancient city-state, and that consequently Schönborner's work does not mean to disapprove of populousness in rural districts. But these views really supplement one another. The conditions prevailing at the time especially impressed this part of Aristotle on Schönborner's mind.³

¹ *De Aerario Publico* (1626), cap. iii, sec. 5. Cf. Kaspar Klock (1583-1655), *De Aerario*, Nuremburg, 1651, p. 704: "Nemo magis videtur de republica bene mereri, quam qui plurimis liberis abundat; quare foecunditas praemio, sterilitas poena afficienda est." Also, "Matrimonium violare maximum facinus est; proximum non contrahere." Georg Obrecht (1547-1612), one of the most noted German jurists of this time, made several valuable suggestions in regard to securing information concerning the number of people and their wealth in *Fünff Unterschiedliche Secreta Politica*, Strassburg, 1617, pp. 189 *et seq.*

² Roscher, *Geschichte der National-Oekonomik in Deutschland*, p. 148, Jolles, *op. cit.*, p. 200; Aristotle, book viii.

³ "Non satis probe prospectum videtur civitatibus populosis; quoniam confusionem munerum civilium introducit multitudo civium: atque; illi ipsi intra eadem moenia degunt, ita inter se ignoti sunt, moribusque;

§ 5. *The Publicists and Other Writers of the Romance Group.* The national ambitions of all statesmen of this period are typified in the *Commonwealth* of the great French minister Jean Bodin (1530-1597). It did not occur to him to fear over-population; on the contrary, he saw all good in great populousness. He was enthusiastic over the Julian laws on marriage, and largely to their revocation he ascribed the moral degeneration and the final fall of the Roman Empire. To him the most populous countries were always necessarily the richest and strongest and the most favorable to the development of art, science and industry.¹ But Bodin's views were not founded on a close acquaintance with the peasants and other lower classes, and he failed to see their lives and struggles in a broad humanitarian light. In his consideration of the different classes he had no independent place for the peasants, but regarded them apparently as an appendage to the corn-dealers, bakers, butchers, *etc.* In agreement with his general theory he considered the restrictions placed on population in the theoretical writings of the Greek philosophers as inadvisable: "That which cannot be spoken of without great impiety, that the goodliest creature which God hath made should not only be made away after it is born, but also destroyed in the mother's womb."²

aliquantum discrepantis, ut pene alii esse videantur. Inde periculis communibus ingruentibus animorum sequitur distractio et seditio. An fructuosa sit tanta civium copia, viderunt ii, qui habenas populosissimarum civitatum moderantur mediocri itaque; civium numero contenta civitas felicius efflorescat: si tamen jam multi radices egerunt, non ideo excindendi, sed potius in classes digerendi curiisque; et collegiis distribuendi sunt." From *Politicarum Libri*, vii (Ex officina Typ. Nicola Sartorii), lib. iii, cap. xxxviii, p. 280. First published in 1610.

¹ Bks. v, 2; vi, 2.

² Bodin's *Commonwealth* (Knolles), pp. 670, 671.

He objected to Sir Thomas More's idea that there should not be less than ten nor more than sixteen children in a family, "as if he could make nature obey his orders." He disapproved also of any Utopian communism on the ground of its probable bad effect on population. Rather than an absolute equality, he would have us aim at a distribution of wealth which would strengthen the middle classes who are neither rich nor poor, and which would not tend to multiply and weaken the poor. Such causes of poverty as confiscations and excessive taxation should be removed, as should also such causes of great opulence as the intermarriage of the very rich.

Henri IV showed a great deal of insight, for a French king, when he said: "The strength and riches of kings consist in the number and opulence of their subjects."¹ His minister, the Duc de Sully, Maxmilian de Béthune (1560-1641) sought to encourage population in every way, and recommended especially that agriculture and stock-raising be developed to strengthen and enrich the country and people.²

Philippe de Béthune, le comte de Selles et Charost (died 1649), a younger brother of Sully, wrote *The Councillor of Estate* about this time.³ He said: "Every one agrees that to make a state powerful it must be rich, riches being the sinews that support it." Abundance of goods for the maintenance of men are obtained (1) from the earth which yields grains, wood, minerals, drugs, *etc.*; (2) from manu-

¹ Cf. *Nouveau Dictionnaire d' Économie Politique*, art. "Population."

² Says M. Walowski, *Memoires de l' Académie*, 1855, vol. iv, p. 33: "Il est cependant facile de reconnaître que si Louis XIV doit une partie de sa gloire à Colbert, Sully doit une partie de sienne à Henri IV."

³ Translated by Edward Grimeston, London, 1634.

factures; and (3) from commerce with strangers. Statesmen "strive in vain to increase an estate by the manuring of the land and peopling of the towns, if they do not provide to husband it, and to favor the generation . . . of children; being the only means we have of our own to people both countries and towns." Polygamy, said this publicist, is comparatively unfruitful. Concerning the good side of clerical celibacy he remarked: "A single life is seemly for men of the church, and there must be some; but it seems necessary to cut off, or at least to hinder thereafter, this infinite number which unfurnish the state of men."¹

Antoyne de Montchrétien (1576-1621) was of the same opinion as Bodin and Sully. In his *Traicté de l'Oeconomie Politique* he wrote:

Your majesty possesses a great state of fine situation, abounding in riches, flourishing with people, powerful in its good and strong cities, invincible in war, and triumphant in glory. Its territory is capable of supporting an infinite number of inhabitants out of the fertility of the soil which nourishes and of the animals which furnish clothing.²

But though the riches of the state might be immense and the number of people great, it was essential that means should be found for employing the people, since neglect in this matter resulted in the greatest evils. To perform this function great intelligence on the part of those who direct estates and public affairs was requisite. The state should pay more attention to the development of industry and thereby check the emigration of those who go to

¹ P. 327; see also pp. 141, 143, 321-326.

² Th. Funck-Brentano's edition, p. 23. The first edition is that of Rouen, 1615.

Spain, England, Flanders and Germany to seek employment. Neglect of this had resulted in much unnecessary pauperism. Industry, said Montchrétien, is the mother of men, and commerce should be encouraged in every possible way.¹

The Italian Giovanni Botero (1540-1617) was one of the first to study the question of population in a broad, scientific manner. From the time of Plato and Aristotle until after the Reformation we find very few who look at the problem in any but a limited or prejudiced manner. The Greek ideal of having the ablest procreate and survive had elements of great scientific importance in it. But the Roman view was one-sided, and the theological conception of the Church did not lead to a thorough investigation of any but the moral phase of the question; while the position of Luther on the one hand and of the later national writers on the other were either essentially non-scientific or were based on a political point of view. In those early modern non-theological discussions in which the nationalist spirit is subordinated we find at last ideas indicating a clearer conception of the population problem, as distinct from the one involved in marriage and offspring or the poverty of individual persons.

Botero's discussion is found in a work entitled *Delle Cause della Grandezza delle Città*.² It seems to contain the essentials of the Malthusian doctrine. He says that a population, after increasing for some time, cannot continue to increase at the same rate, while it may stand still or even decrease. He declares that it is a mistake to base

¹ Pp. 24-28.

² *Ragione di Stato*, libri x, con tre Libri delle Cause della Grandezza delle Città, di Giovanni Botero, Benese, Venezia, 1592. The edition used in this study is that published in Rome in 1628. It is regrettable that it is not included in the *Classici Moderni Italiani*.

retarding forces on the results of war and pestilence alone; for the populations of the world have always suffered from such things. The ultimate cause limiting population is limitation of the means of subsistence. The *virtus generativa* is stronger than the *virtus nutritiva* and is in conflict with it.¹ The first or generative force is as strong as in the beginning; men are as capable of procreating now as in the time of David or Moses; but the nutritive forces of nature are limited and cannot supply a continually increasing population, though the limits thus fixed are not definite. The additions to existing population would be without end and every city and state would increase beyond measure if it were not for the fact that limited supplies also place limits to the increase of people. It is certain that nothing in the world has caused so much strife and war and bloodshed as the great struggle for subsistence. The cannibalism of the Indians, the slave-trade of Guinea, the robberies of the Arabs and Tartars, the *Völkerwanderungen*, long and fearful wars, the everlasting haggling in the courts—all are due in the last analysis to the limitations of the means of subsistence. This, then, is the primary check to population. The sterility of soils, bad climates, diseases and epidemics are secondary.² Colonies do not depopulate the mother country, for the places of

¹ "Diciamo dunque che l'aumento delle città procede parte dalla virtù generativa degli uomini e parte dalla nutritiva di esse città: la generativa senza dubbio che sempre è la stessa, almeno da 3000 anni in quà. Onde, se non vi fosse altro impedimento, la propagazione degli uomini crescerebbe senza fine e l'aumento delle città senza termine; e se non va innanzi bisogna dire che ciò procede da defetto di nutrimento e di sostegno. Ora il nutrimento si cava o dal contodo della città nostra o da' paesi altrui; e se la città ha da crescere, bisogna che le vettovaglie li sieno portate da lungi." In libro iii, pp. 73 *et seq.*

² See also libro i, cap. ii. Cf. G. Jandelli in *La Filosofia delle Scuole Italiane*, vol. xviii, pp. 158 *et seq.*

the colonists are soon filled by the operation of the *virtus generativa*.

Though Botero realized that sufficient subsistence was necessary for a population, he thought that a people should be as numerous as possible, for this is to the state's advantage. He would make the laws favorable to marriage, but he would not offer premiums for numerous offspring. Governments should not permit great discrepancies in the ages of marrying couples, as this is not conducive to fruitfulness. Population is increased, as far as this is possible, by increasing the number of births, the preservation of infants and the prolongation of life. Finally, he recommended an effective system of public aid for the poor. We see, then, that Botero was a strong nationalist in advocating increase, but that he showed a far deeper insight into the problem than his average contemporary or successor.

In Tomasso Campanella's (1568-1639) *City of the Sun*¹ we find a partial reversion to the ideals of Plato and Aristotle. He laid stress on the matter of taking great care in forming those unions from which offspring result. He wrote: "We exhibit a studious care for our breed of horses and dogs, but neglect the breeding of human beings." He proposed that the state should regulate all sexual relations systematically, and the rearing of children should be carefully attended to. The procreation of children should "be managed for the good of the commonwealth and not private individuals. . . . Children are bred for the preservation of the species and not for individual pleasure, as Saint Thomas also asserts. . . . The breeding of children has, then, reference to the commonwealth, and

¹*Civitas Solis*, published for the first time in 1637. See Morley's *Ideal Commonwealths*.

to individuals only as constituents of it." The fact that Campanella was intimately connected with the Church seems to be reflected in his wish to discourage "the love born of eager desire" and to encourage only that more rational Platonic affection "born of friendship." His philosophy is based on the belief that men should "follow nature and the books of God."¹

Joannes Mariana (1536-1623) was one of the first Spaniards to give expression to mercantilist ideas, and this he did in a work not unlike Bodin's, entitled, *De Rege et Regis Institutione*.² He advocated that articles imported from any foreign country should be subjected to a heavy duty. This would not only prevent the exportation of much money, but since people would naturally, whenever possible, go where they could best sell their products, if the tariff on imported goods were so high as to destroy their profits, they would come to Spain and, as inhabitants of the country, avoid these duties and—a matter of great importance—they would increase the population.³

The treatment of the question by the Spanish publicist Saavedra-Faxardo (1584-1648), though incidental in char-

¹ Campanella treated population in what was intended as a more practical manner in *A Discourse Touching the Spanish Monarchy*, "newly translated into English, London, 1654." In this work he said, "Let him (the King) raise himself a treasure of his subjects' bodies, by causing them to multiply by frequency of marriage, to which they are to be encouraged by honours, enticements," etc. Another reason why the King should see to it that the daughters of his subjects marry is to prevent their falling into vice, which is apt to occur in cases of involuntary celibacy. He advised the King to permit his soldiers in other countries to "seize upon women and carry them away with them by force . . . for the intermixture of races would do good." Pp. 70, 71, 86.

² Joannis Marianæ Hispani e Societate Jesu *De Rege et Regis Institutione*, libri iii, anno 1605, Moguntiae. The first edition appeared in 1598

³ Lib. iii, cap. vii-x; cf. various chapters in *Historia de España*.

acter, is yet more complete than that of Mariana. It is found in his *Idea Principis Christiano-Politici*.¹ The densest population had been observed in the wealthiest and relatively most powerful countries, and in this Saavedra thought he had sufficient data for a wide generalization. As was generally the case, the thought of military conscription and fiscal advantages carried great weight in this connection. Like Sir William Temple and other later writers, he believed that great populousness made it necessary for the people to be diligent and saving, which was, of course, in its favor. He speaks of the ancient notions regarding the significance of population, especially those of the Romans, and of the ancient plan of encouraging procreation by laws against celibacy. Like so many other writers of the time, he considered that the king's strength lay chiefly in the number of his subjects, which properly interpreted was true.²

The state was not completely developed in its strength, according to Saavedra, if the plebeian element alone was encouraged to increase; it was necessary to take measures to prevent the nobility from becoming weak; and the king should give this his attention, so that the best families might not disappear. He should prohibit dowries, at least

¹ *Idea Principis Christiano-politici Centum Symboli expressa*, a Dídado Saavedra-Faxardo, Equité. . . . Bruxelles, MDCXLIX. First edition published in 1640.

² "La fuerza de los Reynos consiste en el numero de los vasallos. Quien tiene mas es mayor Principe, no el que tiene mas Estados: porque estos no se defienden ni ofenden por sí mismos, sino por sus habita dores, en los quales tienen un firmísimo ornamento; y así dixo el Emperador Adriano, que guerria mas tener abundante de gente el Imperio que de riquezas; y con razon: porque las riquezas sin gente llaman la guerra, y no se pueden defender; y quien tien muchos vasallos tiene muchos fuerzas y riquezas. En la multitud de ellos la dignidad de Principe, y en la depopulacion sa ignominia." Vol. iii, pp. 38 *et seq.*

large ones, because of their bad effects. The number of customs and religions which might be permitted in the country should be as narrowly limited as feasible. Such differences were harmful, this being especially apparent in the domestic life of the people.

Saavedra indicates two causes of depopulation, internal and external. The first, and main one, is the internal, which consists in excessive tributes, faulty cultivation of the soil, neglect of the arts and the sciences and commerce, and a too great number of holidays. Bad laws of primogeniture and similar regulations which cause dissatisfaction and suffering should be avoided. The king's court ought to set the people a good example in matters relating to frugality and good sense in the administration of affairs. Excessive luxury and pomp on the part of the rich often lead to poverty and dissipation among the poor. The main external causes of depopulation are wars¹ and emigration to colonies. The latter is, however, not harmful if it is in moderate proportions.

§ 6. *Modern English Writers before the Restoration.* A great dread of over-population appeared in England at the close of the sixteenth and in the first half of the seventeenth century. Wretchedness and poverty seem to have been more widespread, or at least more apparent, at this time than ever before or afterwards. It was also in this period that the well-known Elizabethan poor law was enacted. To relieve the painful conditions existing colonial projects were recommended, and it was in these years that the first colonies were planted by the English in America.

The superfluity of people was a matter of complaint in the days of Raphael Holinshed (died 1580?), as is seen

¹ "La guerra es un monstruo que se alimenta con la sangre humana," p. 43.

in the following excerpt from his chronicles. There were some men

affirming that we had already too great store of people in England; and that youth, by marrying too soone, do nothing profit the countrie, but fill it full of beggars, to the hurt and utter undooing (they saie) of the commonwealth. . . . Certes, in some men's judgment, these things are but trifles and not worth regarding. Some also do grudge at the great increase of people in these daies, thinking a necessary brood of cattell farre better than a superfluous augmentation of mankind.¹

The same fear of over-population is evidenced also in the writings of George Cock (died 1679).

They who could not maintain a wife might not marry, for a license they could not have, the bishops taking care enough with their officers that the poore might not have lawful favor of a license, lest their hospitality might be changed or impaired by their maintenance, and their publicly denouncing the banns of marriage the first time. The parish, for like reason, hindered the second, if any cause were; and usually none were permitted marriage till the man were thirty-five at least and the woman thirty.²

This was in the reign of James I. Cock goes on to say that the rules were very often laxly enforced, so that many coupled from the ages of fourteen to eighteen on the part of the women, which had bred multitudes of "weak and tender poore."

Sir Walter Raleigh (1552?-1618) is one of those writers

¹ Vol. i, p. 344.

² Cf. See George Cock, *English Law or a Summary Survey, etc.*, p. 50. Barrington's *Ancient Statutes*, p. 395.

who, like Botero, are in a strict sense to be regarded as precursors of Malthusianism. His opinions on the subject of population are to be found mainly in his *Discourse of War in General* and in the *History of the World*. In his *Discourse* he says:

When any country is overlaid by the multitude which live upon it, there is a natural necessity compelling it to disburden itself and lay the load upon others, by right or wrong, for (to omit the danger of pestilence, often visiting them which live in throngs) there is no misery that urgeth men so violently unto desperate courses and contempt of death as the torments and threats of famine. Wherefore, the war that is grounded on general, remediless necessity, may be termed the general and remediless or necessary war.¹

In the *History of the World*, Raleigh expresses the opinion that the earth would not only be full, but overflowing with human beings, were it not for the effect of hunger, pestilence, crime and war, and of abstinence and artificial sterility.² He remarks elsewhere that Spain had not become depopulated by her many colonies, but contained as many people then as it had theretofore, that is, always as many as the land could nourish. If Edward III had attained his purpose to conquer France, he says, England would be as full of Englishmen as ever, though many should have migrated across the Channel. In extraordinary times wars and plagues keep down population; but in times of peace and quiet many refrain from marrying because they fear they will not be able to support their children, while some marry rich old women, which nat-

¹ *Works of Sir Walter Raleigh, Political, Commercial and Philosophical* (Edited by Thomas Birch, London, 1751), vol. ii, p. 25.

² See especially bk. i, ch. viii, sec. 4.

urally retards increase. The general who leads an army to a war which kills many, sometimes does a service greater than he knows by relieving a congested country of its too great numbers; for a state can have so great a population that it becomes sick. Even when the means of subsistence are in plenty and more than could readily be consumed, still there remains a lack of proper methods of distributing them.

The views of Lord Bacon (1561-1626) fall into the same class as those of Raleigh. In his *Essay Concerning Seditions and Troubles* he says:

The first remedy or prevention is to remove, by all means possible, that material cause of sedition whereof we spake, which is want and poverty in the state. To which purpose serveth the opening and well-balancing of trade, the cherishing of manufactures, the banishing of idleness, the repressing of waste and excess by sumptuary laws, the improvement and husbandry of the soil, the regulating of prices of things vendible, the moderating of taxes and the like. Generally, it is to be foreseen that the population of a kingdom (especially if it be not mown down by wars) do not exceed the stock of the kingdom which should maintain them.

He adds that the nobility and clergy should not be permitted to increase in undue proportion to the common people, "for they bring nothing to the stock."¹ In the *Essay on the True Greatness of the Kingdom* he says also:

Let states that aim at greatness take heed how fast their nobility and gentlemen do multiply, for that maketh the common subject grow to be a peasant and a base swain. . . . This which I speak of hath been nowhere better seen

¹ *Works* (Boston edition, 1860), vol. xii, p. 127.

than by comparing England and France; whereof England, though far less in territory and population, hath been, nevertheless, an overmatch; in regard, the middle people of England make good soldiers, which the peasants of France do not.

In the same essay he states that a kingdom's greatness consists essentially in population and breed of men, strong and able to bear arms. Other qualities, such as good government and "the commandment of the sea" are, however, also necessary. He mentions the ill effects of enclosures, which deprived the country of much tillable land, which "bred a decay of people, and by consequence a decay of towns, churches, tithes and the like."¹ In another place he observes that "there be many tokens in this realm rather of press and surcharge of people than of want and depopulation."²

In the *New Atlantis*, Bacon took occasion to dwell on the benefits of chastity and condemned heartily the licentiousness prevalent in European cities. Marriage should not be permitted until a month after the first interview of the contracting parties. Great care should be exercised in the selection of mates, but such ideas as those set forth in More's "feigned Commonwealth" he deems unsuitable.³

In the *Leviathan* and the *De Cive* of Thomas Hobbes (1588-1679) we also find an appreciation of the dependence of population on subsistence. The nutrition of a commonwealth, Hobbes says in the chapter on the "Nutrition and Procreation of a Commonwealth," depends on the abundance of the materials of wealth, the fruits of the land and the sea, given by nature freely or in exchange for

¹ *History of King Henry VII*, *Works*, vol. xi, p. 143.

² *Observations on a Libel*. Cf. also *Essays on Irish Colonies* and *The Prolongation of Life*.

³ Cf. *Utopia and New Atlantis* (ed. St. John, 1850), pp. 143-144.

labor, including those resources which enable a country to purchase supplies from foreigners. It depends secondly on the distribution of these material goods in accordance with the laws of property. It depends also on the preparation or "concoction" of those goods, which must be converted into such materials as can be transported and exchanged for what may at any time be used for purposes of subsistence.¹

In the essay on the *Citizen*, Hobbes refers to the subject again, but this time especially regarding the perpetuation of a commonwealth. Population depends on food, and a country may not be able to provide for all its citizens. In such an event the excess should be transported to lands, preferably colonies, less fully peopled. This would lead not to a lessening of the numbers already in the mother country, but to a better cultivation of the soil in the new. In the end, however, "if the earth be too strait" for the feeding of its inhabitants, he sees no recourse but war.²

Adam Moore, in his book entitled *Bread for the Poore*,³ is thoroughly impressed by the misery of the lowest classes. He wished to provide some remedies for the painful conditions existing. "How fearful and desperate," he said, "is your want of bread upon the least defect of a harvest."⁴ He did not think the state should endeavor to stop "the fountain of their flowing issue," that is, of the "unemployed wherein this land so infinitely aboundeth," in order to relieve their want. The state should rather reform the conditions under which they must exist; and he continues:

For albeit God hath commanded man to increase and mul-

¹ Chapt. xxiv.

² Chapt. i, §§ 13, 15, *et passim*.

³ Published in London, 1653.

⁴ Pp. 3, 30, 31, 39, especially.

tiply and to fill the earth, ordaining matrimony free and lawful to all, we (supposing he hath not given enough to feed us), though not by our command verbally, yet by our act really, stop that issue of his blessing by preventing the poore of needful habitations, whereby, indeed, their increase is much hindered.¹

James Harrington (1611-1677) thought that population increased naturally very slowly; and even in his ideal commonwealth of *Oceana*² it increased by only one-third in forty-one years. He endeavored to indicate the relations which urban and rural populations sustain to one another.

The more mouths there be in a city, the more meat of necessity must be vented by the country, and so there will be more corn and more cattle, and better markets; which, breeding more laborers, more husbandmen and rich farmers, bring the country so far from a commonwealth of cottagers that, where the blessings of God, through the fruitfulness of late years with us, rendered the husbandman unable to dispute precedence with the beggar's bush, his trade thus uninterrupted in that his markets are certain, goes on with increase of children, of servants, of corn and of cattle. . . . The country thus growing more populous and better stocked with cattle, which also increases manure for the land, must proportionately increase in fruitfulness,

and enable a larger number of inhabitants to find subsistence.³

Harrington would encourage marriages and showed that

¹ Sadler (*Law of Population*, vol. i, p. 40), commenting on this, says: "One deliberate deed of this nature is sufficient to make a human monster, a multitude of such,—a political economist!"

² Published in 1658.

³ P. 279 (edition of Toland, London, 1771).

he had no fear of any over-population, which had been characteristic of practically all English writers up to his time; he was, in fact, in regard to matters concerning population entirely in agreement with the spirit of mercantilism. He would grant exemption from taxes to a man who was the father of ten legitimate children, partial exemption to him who had five; and if a man had been married three years or was over twenty-five years of age and had no child lawfully begotten he should pay double taxes. Finally, he would establish a Council of Trade to study diligently and apply to the processes of trade all the best methods known, in order that remedies might be applied where mistakes, affecting population in a harmful way, had been made.

CHAPTER IV

THE MERCANTILE SYSTEM AND POPULATION

§ 1. *Introductory.* The mercantile system of politico-economics was substantially, indeed almost entirely, favorable to large and increasing populations. The period in which this system was supreme in most European countries (from the middle of the sixteenth to the middle of the eighteenth century) was notable on account of the formation and growth of great states, whose governments were becoming more and more powerful and expensive. These governments required both men and money for the maintenance of large and, in part, permanent armies, and for the support of splendid and costly courts. Taxation grew as the demands of the governments increased. Each nation worked for its own power and preponderance, and the rulers soon came to regard economic supremacy as necessary for the attainment of political preëminence. Manufactures and commerce made denser populations possible by opening new fields for enterprise. Hence they were encouraged by governmental favor and patronage. Kings desired full treasuries, and it did not take them long to discover that in order to insure their power they needed men as well as money; and so we find the desire for wealth ("money") contemporaneous with the oft-expressed wish for many subjects.

Local and personal economic regulations gave way to the state and national economic policies which we usually group

together under the term mercantilism. In the place of narrow and particularistic conceptions of economic welfare, we meet with conceptions based upon large and increasingly compact organizations, competing with one another and with opposing commercial and political ideals.¹ Economic plans and practices assumed a broader basis in sympathy with the national differentiation and emulation which was taking place at the time.

Since the theories represented by the mercantile system were based very largely on the view that a nation's wealth consisted in the amount of precious metals in its possession, the aim of politicians in every state was to increase the amount of gold and silver in the nation. If these metals could not be supplied from mines within the domains of the king, it was thought that they could be obtained by maintaining a continuous favorable "balance of trade;" that is, the politics of the time aimed at so regulating trade that more goods should be exported than were imported, the difference in value being necessarily paid in the precious metals, thus adding to what was considered the essence of national wealth. But even such a balance necessitated the production of articles suitable for export trade, and this demanded many men skilled in manufacturing trades; so that in order to bring this system or theory of trade to its practical realization it was considered desirable by means of laws, advice and suggestion to increase the number of working people. The greater the population the more could be produced, was the prevailing dogma; and the more there was produced the more there remained for exportation; and the greater the resultant

¹ Cf. Schmoller, *The Mercantile System*, p. 64. Cf. also article on "Bevölkerung" in the *Deutsches Staatswörterbuch* by Bluntschli and Brater; and *Bevölkerungswissenschaftliche Studien aus Belgien* by J. E. Horn, vol i, pp. 14-16 *et passim*.

balance the greater was the amount of gold and silver which had to be imported. The nation would thus be enriched and the national treasury filled; and in the minds of statesmen and kings, jealous of one another's commercial and military strength, this was most ardently to be desired. Such a condition not only indicated a nation's commercial prosperity, but it made the country more powerful in the time of war.

Economic well-being was believed to depend very largely, if not exclusively, on governmental regulation, and the governing powers deemed it their duty, therefore, to enact laws whose enforcement would conduce to this end. Says Filangieri: ¹

Let us turn over the dusty and numberless volumes in which the chaos of European legislation is comprised, and we shall find no one government that has not reserved some prerogative for the fathers of families; that has not granted privileges and exemptions to those citizens who have given a certain number of children to the state; that has not provided some express laws to increase the number of marriages.

Most of these laws bear a more or less direct resemblance to the Julian laws of the early Empire, and they seem often to have been conscious imitations of them.

In the works of writers from about the time of the famous minister of Louis XIV, Colbert, to the middle of the following century, and even later, when the influence of the mercantile spirit was especially strong, we note a remarkable agreement as to the advisability of enlarging the numbers of people, by encouraging marriage, taxing bachelors and placing limitations on them generally, and

¹ *Science of Legislation* (London, 1792), chap. i, p. 19.

of offering rewards and granting immunities to fathers of numerous offspring, in spite of the fact that the efficacy of many of these schemes had been disproved many times before (as they have since) by experience as well as by the logic of philosophers. Indeed, it was believed, often with an enthusiasm bordering on the fanatical, that a nation's strength could depend on practically nothing else than money and populousness.

Some recent writers on the history of economic theory, however, seem to think that the mercantilist writers agreed entirely in advocating increase and means of increasing population; but a careful perusal of the works of mercantilist writers, the earlier ones in particular, will reveal some divergencies, though these are usually slight. Politics and literary discussion had a reciprocal influence, not necessarily leading to a complete harmony of ideas and practices.¹

Roscher says that the mercantilists, whom he, like Ingram, treats as a school, displayed an exaggerated care for mere numbers of people. This statement seems, however, to neglect the circumstances under which this care was given expression. Men certainly were of importance to the continued strength of competing empires. We do not now accept their theories, but we could not expect to find scholars of that time supporting plans of national aggrandizement with the more finished theories of political economy two hundred years later. Nor are the views favorable to increasing population confined to those who in a limited sense are called mercantilists. The

¹Wagner (*Grundlagen*, p. 452) says: "Ich möchte den Satz von Elster, 'die gekennzeichnete Bevölkerungspolitik des 17. und 18. Jahrhunderts stützte sich auf die herrschende Bevölkerungslehre jener Zeit,' eher umkehren, mindestens ihn in dieser umgekehrten Fassung für richtig halten. Denn wie gewöhnlich auf solchen Gebieten haben Theorie und Praxis sich freilich wohl auch hier gegenseitig beeinflusst."

writings of the time, whether the authors accepted the essential tenets of the system or not, almost without exception advise statesmen to encourage fecundity by all possible (and impossible) means.¹ The *Bevölkerungspolitik* and theories of the time relating to population are, in a word, parts of the monarchical desire for national greatness as well as of the trend toward commercialism. It might be contended that this favorable attitude toward increasing populousness was not a necessary part of mercantilism, but the writer believes unsuccessfully; for as matters of history we must admit that in the period of mercantile ascendancy this position was held with great unanimity by writers whose works typify the spirit of mercantilism. There is at least a real, if not a necessary, connection.²

In the practical politics of the seventeenth and eighteenth centuries we notice that the general desire for increase was held in check by the efforts to reduce the number of paupers. The sanest thinkers approved only of that class of workers who were not likely to become a burden to the state, and they disapproved of an excessive number of well-to-do idlers and of those given to luxurious dissipation. This is seen to a great extent in the development of ideas regarding poor laws in England and in many parts of the continent.³ There were, in general,

¹ Cf. Roscher, *Geschichte der National-Oekonomik in Deutschland*, p. 239; Ingram, *History of Political Economy*, p. 39. Bonar (*Philosophy and Political Economy*, p. 132) says: "Not only the adherents of the Mercantile policy, but nearly all economical writers before the Physiocrats, were more or less tainted with these fallacies."

² Cf. Francesco Mengotti, *Il Colbertismo*, *passim*.

³ See *Staatslexikon* (Adolph Bruder), art. "Bevölkerung," and Garnier, *op. cit.*, p. 314; and Pashley, *Pauperism and the Poor Laws*, *passim*.

two classes, besides the wealthy and governing one: the class which had the comforts and some of the luxuries of life, and the large proletarian and peasant element which lived at about the verge of subsistence. The best efforts of statesmen seem, then, to have been to increase the first class as much as possible and to regulate and to increase the second only within reasonable bounds.

§ 2. *Methods of Encouraging Increase.* It was generally considered advisable and possible to increase the birth-rate and thus increase population by the following methods:

(a) By placing various disabilities on celibates. Those who married of their own accord were often given sundry advantages. In certain countries some offices were to be held only by married men. In some countries certain trades were practically forbidden to bachelors except by special permission from the regular authorities and on payment of certain fees or licenses. In the reign of Elizabeth, for example,¹ we find that it was enacted that "every badger-lader, kidder-carrier, buyer and transporter of butter and cheese, corn or grain shall be licensed, unless he be a married man." In many of the German states there was a so-called *Hagestolzenrecht*, or laws unfavorable to bachelors, providing that the property of those who died unmarried, without leaving surviving parents or brothers or unmarried sisters, should be confiscated to the state treasury. Marriage was often made a necessary qualification for holding office. The *Hagestolzenrecht* was, however, gradually abolished, but in Hanover it continued in force until 1732.²

¹Moser, *Von der Landeshoheit in Ansehung der Unterthanen Personen und Vermögens* (Frankfurt a. M. 1773), p. 112 *et seq.* See 5 Eliz., c. 12, s. 4. Cf. Ensor's *Inquiry*, p. 14.

²Roscher, *Political Economy*, vol. ii, p. 347.

Celibacy was not held in high esteem in Spain, even in the later Middle Ages, except in the case of the clergy. Edward Gans cites several instances which indicate this unmistakably. Unmarried men suffered disabilities in regard to holding public office in most of the larger, and probably in the smaller, Spanish cities and towns.¹ This policy was carried out more systematically in the Edict of 1623. The same thing appears to have been true of most European countries. The famous French law of Colbert, in the reign of Louis XIV, in 1666, and others had a similar intent.

In the reign of King William III there was issued a pamphlet by "a person of quality" advocating a tax on bachelors, and on April 22, 1695, the king signed his approval of "An Act for granting his Majesty certain Rates and Duties upon Marriages, Births and Burials, and upon Widowers and Bachelors, for the Term of Five Years, for carrying on the War with Vigour." Ordinary bachelors and widowers above twenty-five years of age were to pay one shilling annually; dukes guilty of remaining single were to pay twelve pounds, ten shillings, and marquises ten pounds.² But this law placed a tax on marriages and births, as had a similar law of Elizabeth, which imposed an assessment of fifty pounds on dukes on their marrying; and this double desire of adding to the amount in the treasury and of checking the marriage of the very poor was somewhat self-contradictory. Similar resolutions are found also in the American colonies at about the same time and later. In 1758, for example, the assembly of Maryland resolved that unmarried men over twenty-five

¹ *Das Erbrecht in weltgeschichtlicher Entwicklung*, vol. iii, pp. 401 et seq.

² See John Ashton, *Social Life in the Reign of Queen Anne, taken from Original Sources*, p. 24.

years of age, as well as widowers of the same age who were childless, who had at least a hundred pounds in property, should pay five shillings annually, while those of three hundred pounds in property should pay twenty shillings, and so on in proportion to their means. These taxes were to pay for the support of foundlings whose numbers had recently increased.

(b) By encouraging marriage directly. The Spanish Edict, which was passed in the reign of Philip IV, and which is in harmony with the ideas of Saavedra-Faxardo and publicists of the time generally, ordained that those who married between the ages of eighteen and twenty-five should be relieved from all taxes and public burdens, till they attained the age of twenty-five. A dowry fund was also provided from which sums were to be taken and given to young women who wished to marry. The law was, no doubt, enacted because of a considerable diminution in the population at about this time.¹

The most notable instance of extensive regulations of this nature is that found in the French law of 1666, to which reference has already been made.² This law was a conscious adaptation of the Roman *Lex Papia et Poppæa*, as is seen by a perusal of the preamble.³ It decreed that whoever married before his twentieth year should be ex-

¹ Cf. Inama-Sternegg, *Die Quellen der historischen Bevölkerungsstatistik* (*Statistische Monatschrift*, vol. xii), p. 442; Conring, *Examen Rerum politicorum Totius Orbis*, pt. i, de Hispania.

² "Portant concession de privilèges et exemptions à ceux qui se marient avant ou pendant leur vingtième année jusqu' à 25 ans, et aux pères des familles ayant dix à douze enfants."

³ "En effet nous ne sourions approuver que les Romains, ces sages politiques qui ont donné des lois à toute la terre, aient accordé des récompenses aux pères qui donnoient des enfants à l' état," etc. Cf. Schöne, *op. cit.*, pp. 153-155.

empt from taxation until his twenty-fifth; that any one, except priests, who had ten legitimate children living should be exempt from taxation during his entire life; that a nobleman having ten children living should have a pension of one thousand livres, and one who had twelve children living should receive a pension of two thousand livres. Persons not of the nobility were to receive half these amounts in like instances. The law seems to have been intended also to check the increase of priests and monks, since they did not further the increase of population.¹

Though this law continued in force only until 1683, parts of it were often incorporated in later regulations. Roscher's comment here seems to sum up the matter very well: "Such premiums are, indeed, superfluous. No nobleman would desire twelve children simply to obtain a pension of two thousand livres."² These premiums may have afforded relief in the case of poor but numerous families, but it can hardly be believed that they could have had any of those desirable effects at which they aimed. It was probably the realization of this fact which led to the revocation of the law.

A few of these old privileges were continued by Louis XV, and it is related that on the birth of his son he gave orders that six hundred maidens should be married at the expense of the state's treasury, and he contributed something to the dowry of each—all this with the naïve purpose of increasing the number of people.³ In ordinary times he ordained that marriage should exempt his sub-

¹ Cf. *ibid.*, pp. 142, 147-148.

² *Political Economy*, vol. ii, p. 348. See Isambert, *Recueil des Lois Françaises*, vol. xviii, pp. 90 *et seq.*, 190; vol. xiv, p. 413.

³ Schöne, *op. cit.*

jects from military conscription. Madame de Pompadour says, in her *Mémoires*, that she once prevailed on the king to apply six hundred thousand livres, designed for a fête in celebration of the Duke of Burgundy's marriage, to the marriage portions of poor young women.

In England there had also been numerous laws whose aim was to encourage marriage. George Ensor mentions a law of Edward VIII which ordained that lords should not remain in possession of their female wards if they did not arrange for the marriage of the latter by the sixteenth year.¹ In the fifth year of Elizabeth, a William Harper gave a sum "for the marriage of poor maids . . . and the remainder to be distributed to the poor, at the discretion of the body corporate."²

There was a law in Prussia requiring people to marry before the age of twenty-five, and providing aid for newly-married couples. This was revoked by Frederick William in 1721.³ The Empress Theresa of Austria, breaking away from tradition, permitted soldiers to marry, that they, as well as others, might aid in increasing the population, and especially the military class. This was in 1767, and in the following year she encouraged marriage by increasing the pay of corporals, sergeants and common soldiers by three kreutzers a day for each legitimate child. The Annual Register comments on this favorably: "This encouragement of matrimony among the non-commissioned officers and soldiers of her army, so contrary to general practice, may well deserve the attention of other powers."⁴ This edict of Theresa was evidently also intended to act as a

¹ *Op. cit.*, p. 41.

² See *The Annual Register*, 1765, p. 95.

³ Elster (*Handwörterbuch der Staatswissenschaften*, Edition 1891, art. "Bevölkerungswesen"), p. 473; Roscher, *op. cit.*, p. 348, note.

⁴ 1768. p. 35; 1767, p. 5.

remedy for many of the dissipations and vicious practices developed in military camps. Frederick the Great sought to increase the number of marriages by shortening the required mourning period to nine months for widows and three months for widowers.¹

Similar laws existed in Russia, Switzerland and Italy, and practically everywhere in Europe. On the birth of an heir to some royal or noble family it was quite usual for the father to express his satisfaction partly by aiding dowerless girls to marry.²

(c) By encouraging fecundity. This method was, of course, consequent on the encouragements to marriage, or it was at least so intended. The Spanish and French laws have already been mentioned, and these, like most laws encouraging marriage, contained express or implied provisions rewarding fecundity. The French law which granted rewards for ten or twelve children legitimately begotten, also provided that these rewards were to be withheld if such children became priests, monks or nuns. Laws of this nature sought generally to prevent unfruitful unions, due to excessive differences in the ages of those marrying or to other obvious causes. Male offspring were considered more worthy of reward than female, as is seen, for example, in the section of the Spanish law which grants exemption from taxation for six legitimate male children.

Even as late as 1796, two years before the first appearance of Malthus's *Essay*, we see Pitt urging the English Parliament to come to the aid of fruitful but impecunious families:

¹ Mylius, *Corpus Constitutionum Marchicarum, continuatio III*, no. xxii, p. 179. Cf. Elster, *op. cit.*, p. 473 *et seq.*, and Roscher, *op. cit.*, p. 348, note.

² Cf. *Annual Register*, 1767, p. 66.

Let us make relief in cases where there are a number of children a matter of right and honor, instead of a ground of opprobrium and contempt. This will make a large family a blessing instead of a curse; and this will draw a proper line of distinction between those who are able to provide for themselves by their labor and those who, after having enriched their country with a number of children, have a claim upon its assistance for support.¹

(*d*) By making the punishments for illegitimate births less severe or by removing such punishments entirely, and by providing hospitals for foundlings. In commenting on the reaction against Calvinistic and Puritan tendencies, Professor Patten makes some very suggestive remarks on the social and moral life of England in the time when mercantilism was predominant. The games connected with the May-pole and other festivals gave occasion for much sexual immorality, which he thinks the public policy tacitly approved.

The key to the situation lies in the once universal notion that the popular sports and amusements, by exciting the sexual passions, promoted the growth of population. The loss of virtue that the Puritans denounced in the May games was to the ruling class an argument in their favor. The nobleman who debauched the wives and daughters of his tenantry did not think he did wrong; on the contrary, he told himself that he was doing the nation a service. . . . Malthus . . . had to convince not only the ruling class, but the clergy; for every one believed that the illegitimate children even of a pauper were a national blessing, helping to make the nation greater and more prosperous. . . . It must be admitted that there were some reasons why statesmen should desire an increasing population. The great plagues were coincident with

¹ Hansard's *Parliamentary Debates*, vol. xxxiii, p. 710.

the rise of Puritanism. Labor had grown scarce and high. The burden of this change fell on the upper classes.¹

Professor Patten's ideas here undoubtedly involve some exaggeration, but that this was the real, though tacit, feeling of the governing class is, it would seem, generally correct.

One of the most obvious exemplifications of this attitude is found in Iceland in the eighteenth century. The island had been very considerably depopulated because of various internal misfortunes, so that the king of Denmark determined by statute that no disgrace should fall on any maiden who had as many as six children.² A greater leniency in regard to illegitimacy in Prussia is seen in many writings of the period following the Thirty Years' War, just as in England after the plagues. Fecundity becomes of such importance that, as in less civilized times, virtue is not considered so desirable as when population is about as great as it can comfortably become. This was the theory on which Frederick the Great acted when he decreed that no fallen woman should be required to suffer the usual penance, and later when he provided punishments for those who should, by word or deed, try to make the life of such a woman more painful than it was.³ Such regulations were also intended to lessen the temptations to commit abortion and infanticide, which lessened, it was thought, the possible number of people.

It may be remarked parenthetically that Frederick was

¹ *History of English Thought*, pp. 137, 138.

² *Cf. Elster, op. cit.*, p. 473.

³ *Novum Corpus Constitutionum Prussico-Brandenburgensium præcipue Marchicarum*, lii, p. 1245. Zachariae, *Vierzig Bücher von Staate*, p. 112, note.

heartily in favor of the *Volksvermehrungspolitik* in general. He says, in fact, that "cet axiome est certain, que le nombre des peuples fait la richesse des états,"¹ and this idea runs through many of his enactments and writings.² In 1741 he writes to Voltaire that he "regards men simply as a herd of deer in the park of a great noble, which has no other function than to people and fill the enclosure." He seems to have realized that a population depends on the food supply, but the idea was not consistently held. He believed, for example, that large armies did not draw any strength from the agricultural or industrial pursuits or lessen the total product, for the peasants remaining in the fields and the laborers in the towns and cities were sufficient to perform the necessary labor, so that the men in the armies were not needed for other purposes. If there were more in these occupations there would be a superfluity of people, who could not live except by begging or robbing—certainly a naïve conception. For such reasons, he thought, the *Völkerwanderungen* of the past occurred. In his day he believed that the population in the northern parts of Europe was less than it had formerly been; but population could, nevertheless, increase very much under the then prevailing conditions. The use of luxuries had increased, and this had given occasion for many industries, which afforded a living to many who would otherwise have been obliged to emigrate, as had been the necessary custom in primitive times. Altogether we may say that Frederick had but incomplete theories concerning the object of his desires—populousness.³

¹ *Oeuvres de Frédéric le Grand*, iv, p. 4.

² Cf. *Mémoires de 1763 jusqu'à 1775*, vol. vi, p. 82: "Surtout considérant que le nombre des habitants fait la richesse des souverains."

³ *Oeuvres*, xxiv, p. 506; also ix, p. 196.

The establishment of foundling asylums in this time by Francke and others has considerable significance. They were, primarily, the outgrowth of altruistic motives, but the saving of lives for the political purpose of increasing the number of people, on whom the king's strength depended, was a ground for state support. We find this plainly expressed in many political works of the seventeenth and eighteenth centuries.

George Ensor says of Gustavus III of Sweden that he "was a great populator."¹ He established apothecary shops, lying-in hospitals, foundling homes and the like. The same policy was pursued in Switzerland, and in fact generally throughout Europe. The *Annual Register* says of Catherine of Russia, that

The present empress of Russia has founded an orphan-house in Moscow, which the beginning of this month (May, 1765) portioned out twenty-five couples that had been brought up in it, giving each of them fifty rubles. It is said, with the same view of increasing population, that the punishment of adultery has been changed in that country from severe penance (it was formerly burying alive up to the waist) to an ordinary fine.²

The historian Tooke relates that Catherine and other Russian rulers of the eighteenth century had built hospitals, medical colleges, foundling asylums and orphanages with the same view in mind.³

§ 3. *Immigration and Emigration.* In the political literature generally—though there are exceptions—and in the statutory regulations of those times we find that to en-

¹ *Op. cit.*, p. 163.

² 1765, p. 95.

³ *View of the Russian Empire in the Reign of Catherine the Second*, vol. ii, pp. 166-168 *et passim*.

courage immigration and to prevent emigration *en masse* in all cases and in individual instances quite commonly, were considered policies consistent with national aggrandizement and essential to it.

(a) The Spanish edict of 1623 promised those who settled in the country and engaged in some productive trade exemptions from direct taxation. Inducements to intending immigrants were also offered in various German states, particularly in Prussia and Austria. The Great Elector issued a patent in 1685 which permitted refugees from France, after the revocation of the Edict of Nantes, to immigrate to Prussia, where they were aided in colonizing. In like manner, in 1688, he welcomed emigrants from the Palatinate; and in 1721, 1726, and 1736 many evangelical subjects of the grand-dukes of Salzburg and Bohemia were received by Prussia.¹ Frederick also gave a great variety of special rights and privileges to immigrants, especially to such as were likely to be of greatest value to the state—merchants, skilled artisans, *etc.* They were not only relieved for long terms of years from the payment of taxes, but they were often given land, if agriculturists, and aid in finding desirable places of settlement. Sometimes, it seems too, that they were given financial aid in the form of loans. Similar encouragements were offered in Brunswick, Hessen-Hamburg, Wurtemberg and Bavaria, while in some provinces even more specialized forms of aid than the ones mentioned were employed.

In Austria, in 1781, the empress Theresa granted her famous patent of tolerance, which gave to non-Catholic immigrants and residents practically the same important political rights as were enjoyed by Catholics. Its purpose

¹ See Appendix to *Corpus Constitutionum*, *op. cit.*, vol. vi; also vol. i, p. 403.

was not, however, based simply on tolerance. It encouraged the immigration of trained mechanics and professional men and artists by granting them the privilege of leaving the country without paying the special fees, or *Abzugsgeld*, and by giving them the rights of masters in their trades. Money aids were also provided. Regulations of this kind must have had a beneficent influence on the industries of the country;¹ and the religious tolerance which often furnished the suggestion for such laws was seconded by the desire to increase the population.

In Russia, Peter the Great had pursued similar policies in his relations with the Swedes, and later Catharine II made great efforts to encourage settlements along the Volga, especially in 1762, 1765 and 1783. Tooke says that Catharine "applied millions of rubles to increase the population from without."² So early in her reign as 1762 she published a manifesto inviting foreigners, upon advantageous terms, to come and settle in her dominions, and Tooke continues:

If their means be not competent to the journey, they will be furnished with money by the Russian ministers and residents at foreign courts. Exemptions from taxes for a stated time, . . . five, . . . ten, . . . or twenty years, . . . free dwelling for a half year, . . . these invitations and advantages have drawn a great multitude of foreigners, particularly Germans, into Russia.³

(b) The fact that there were also laws to check emi-

¹ Elster, *op. cit.*, says: "Es ist gewiss uns zur Genüge bekannt, dass durch diese Politik nicht nur die Bevölkerung in den betreffenden Ländern vermehrt, sondern dass vielfach auch die gewerbliche Entwicklung in erfreulicher Weise gefordert worden ist."

² *Op. cit.*, p. 241.

³ P. 243.

gration, often practically forbidding it, placed the different countries in somewhat the same position in relation to one another as players in a game where one must lose in order that the other may gain. This was not always the case; however; for when a country was seemingly overstocked with people, emigration could relieve the misery prevailing, while it added to the population of a more prosperous district or country. When people fled from one country to another for religious and not for economic reasons, however, the case was clearly one in which the first country would lose. It was the general policy to direct emigration to colonies where the emigrants would gain in prosperity themselves, while enriching the mother country, instead of adding to the strength of a rival government.

In the Spanish edict we find again that, in strict accord with these ideas, it was forbidden any one to leave the kingdom *cum familia et bonis*.¹ Colbert took steps to check emigration in 1669, but the edict of this year was for the greater part simply a renewal of provisions in the Code Michau of 1629. These regulations were not successful in stopping the egress of persecuted Huguenots, so other penalties were added in 1682 to those already existing. In 1685 it was decided that ship-captains, merchants or sailors who aided Huguenots to leave should be liable to fines of three thousand livres, or corporal punishment. The death penalty even was soon afterwards made the punishment for aiding in the escape of any intending emigrants, and half the property of such persons was given to the informer.²

Frederick William of Prussia passed stringent laws, in 1721, forbidding any of his subjects to leave the country

¹ Cf. Conring, *Examen Rerum*, etc., iv, p. 71 *et seq.*

² C. A. Schmidt, *Geschichte von Frankreich*, vol. iv, pp. 447, 453.

with the intention of remaining away permanently. The death penalty was deemed proper if any one induced a peasant to emigrate, and two hundred thalers was given to the one who arrested an emigrant.¹ In Bavaria, and in Switzerland also, emigration was strictly prohibited. Frederick the Great made it a criminal offense, with severe punishments, for laborers and peasants to leave the country. In 1768 a general edict against emigration was promulgated. Only those having special permission could leave, and such permission, it is almost needless to remark, could practically not be obtained by the peasantry or the working class generally.² Austrian regulations of 1781 endeavored to check emigration, especially in certain of the more skilled trades, such as the Bohemian glass-workers. In 1784 a more sweeping law was enacted to the effect that all emigration without permission was illegal, and as punishment therefor it was provided that all the property of the guilty person be confiscated, and if his attempt were frustrated he was liable to three years' imprisonment.³

We might pick out several English statutes to show that the English practice and theories regarding these matters did not greatly diverge from those of continental countries. An example is found in the reign of Charles I, 1637, in "A proclamation against the disorderly transporting His Majesty's subjects to the plantations within the ports of America," which enjoins

Officers and ministers of his several ports in England, Wales

¹ Roscher, *Political Economy*, vol. ii, p. 353. Roscher says (p. 350) that Frederick William also spent *ca.* 5,000,000 *Thalers* in establishing immigrants.

² Cf. v. Berg, *Verordnungen*, p. 72 *et seq.*

³ Elster, *op cit.*, p. 475.

and Berwick, that they do not hereafter permit or suffer any persons being subsidy men or of the value of subsidy men to imbarque themselves in any the said ports thereof, for any of the said plantations, without license from His Majesty's commissioners for plantations . . .

The English rules do not seem to have been quite as strict as those on the continent, possibly because limits to population were seen in the size of the island. Moreover, few Englishmen emigrated, except to the colonies, and a satisfactory number of immigrants came to the country without the employment of special inducements.¹

The governmental efforts to keep the population of the country within the territorial limits of the state were natural, and they were supported by the majority of writers on political and economic affairs before 1750; but there were some writers who opposed such attempts. Among them, as we should expect, we find the name of Pufendorff; Benjamin Franklin, Beccaria and Mirabeau opposed these restrictions, as did also Huber and Bentham.

The *Volksvermehrungspolitik* and the mercantile and growing national spirit were, then, contemporaneous and mutually supported each other. The literature bearing on the matter will be treated in detail in the next two chapters.

¹On the regulation of immigration by the American Colonies, see E. E. Proper's *Colonial Immigration Laws* (Columbia University Studies in History, Economics and Public Law, vol. xii, no. 2), chaps. ii and iii.

CHAPTER V

MERCANTILIST AND OTHER WRITERS, PARTICULARLY IN ENGLAND AND FRANCE, 1660-1748

§ 1. *General Survey.* In the writings of this period we find that the political, national, mercantile point of view is the prevalent one. This holds true whether the form of treatment is statistical, literary, philosophic, economic, or simply political. All writers agree with the established maxim that numbers mean strength and prosperity, with no more reservation, as a rule, than we find in the beginning of the seventeenth century in England. But the general treatment is more thorough.¹

In the beginning of the reign of Charles II we note the development of "Political Arithmetic," especially in the works of Graunt and Petty. Comparisons of the birth and death rates were made and the causes of variations were investigated, thus furnishing the first mathematical foundations for the consideration of population problems. Though some calculations had been made before this time, it seems that these studies form the beginning of that group of writings which, like those of Cumberland, Hume, Wallace and Suessmilch, estimate the increase and decrease of popula-

¹ Cf. Wagner, *op. cit.*, p. 451: "Eine halbwegs wissenschaftliche Behandlung der Bevölkerungsfragen beginnt kaum vor dem 17. Jahrhundert und gelangt erst mit der Herrschaft des Mercantilismus in Theorie und Praxis zu einer gewissen Bedeutung und methodischen Ausbildung."

tion in exact figures, endeavoring therefrom to form definite conclusions. They are continually referred to by succeeding writers.

Then we have that large group of writers who wrote essays on commerce, beginning with Mun and Fortrey and continuing in one form or another indefinitely—that is, the more purely mercantilist writings. The writers sought to discover those causes which hinder increase and to suggest governmental remedies, besides dissuading the people from those personal habits and vices which form barriers to multiplication. In general, these writings reflect the desire for national preëminence, but often with some attempt at a moral consideration of the problems involved. No great appreciation of that misery among the masses due partly to faults in the politico-economic system is ordinarily apparent, but still there is some advance in this particular.

A mixed group of English writers is that composed of Dugard, who looks at the matter of increase from the standpoint of the individual, and of de Mandeville, who in literary form gives evidence of Malthusian ideas; of Cumberland, who makes mathematical estimates on theological bases, and of Berkeley, who, displaying no great comprehension of population problems, accepts the prevalent nationalist ideal.

The writers of France and other continental countries are for the most part thoroughly mercantilistic. The philosopher Spinoza and the statesman de Witt are spokesmen for the Dutch commercial spirit, as also is the great ecclesiastic Bossuet of the French. The poet Fénelon is of the same type. The French mercantilists show no perceptible advance until the time of Melon. The Spaniard Ustariz displays some originality, but Law varies only so far as his monetary theory suggests. Cantillon shows more in-

sight into the problem than any writer not strictly English or German.

§ 2. *Graunt, Petty and Hale.* Captain John Graunt's (1620-1674) work entitled, *Natural and Political Observations upon the Bills of Mortality*, was first published in 1662.¹ He tried to show the rate of increase in rural districts as compared with cities and to indicate what are the natural and special checks to it. The population of London increases by procreation much less rapidly than that of the surrounding country; its increase is due chiefly to immigration. "We come to show," he says,

why although in the country the christenings exceed the burials, yet in London they do not. The general cause of this must be, that in London the proportion of those subject to die, unto those capable of breeding, is greater than in the country; that is, let there be an hundred persons in London and as many in the country; we say, that, if there be sixty breeders in London, there are more than sixty in the country, or else we must say, that London is more unhealthful or that it inclines men and women more to barrenness than the country.²

He continues on the next page that,

As for unhealthfulness, it may well be supposed, that although seasoned bodies may and do live near as long in London as elsewhere, yet newcomers and children do not; for the smoaks,

¹ A reprint of the fifth London edition is found in C. H. Hull's *Economic Writings of Sir William Petty*, vol. ii. Professor Hull reaches the following conclusion regarding the disputed authorship of Graunt's work: "The Observations were published over Graunt's name. Everything about them, as well as everything known of his life, was consistent with the assumption that he wrote them; he had the incentive, the opportunity, time, and, in the minds of his contemporaries, the ability." Vol. i, p. li.

² Pp. 61-62 (fifth edition).

stinks and close air are less healthful than that of the country. . . . As for the causes of barrenness in London, I say, that although there should be none extraordinary in the native air of the place; yet the intemperance in feeding, and especially the adulteries and fornications, supposed more frequent in London than elsewhere, do certainly hinder breeding.

He thinks that, in a general way, the more populous a place the more unhealthful it is apt to be, and this accounts for the varying death-rates as between London and the country roundabout.¹

Graunt notices the differences in the numbers of males and females born; males exceed the females, according to his tables, on an average of "about a thirteenth part."² This observation gives him an opportunity to discuss the problem of marriage. "The Christian religion," he remarks, "prohibiting polygamy is more agreeable to the law of nature, that is, the law of God, than Mahumetism and others that allow it; for one man having many women, or wives, by law, signifies nothing, unless there were many women to one man in nature also." "Moreover, although a man be prolifick fourty years, and woman but five and twenty, which makes the males to be as 560 to 325 females, yet the causes above mentioned [wars, accidents, colonies, plagues] and the later marriage of the men reduce all to an equality."³ The celibacy prevalent "in Popish countries" hinders the multiplication of the people, for where there are ten men—so runs his argument—to ten marriageable women, and two of the former are celibates, two women (polygamy being prohibited) must remain unmarried, and, as is often the case, they as a consequence drift into promiscuity and vice, which is unproductive and

¹ Pp. 65-66.

² Pp. 65-66.

³ P. 67.

leads to "abortions or secret murthers."¹ His conclusion reads thus: "From what hath been said appears the reason why the law is, or ought to be, so strict against fornications and adulteries; for if there were more universal liberty, the increase of mankind would be like that of foxes at best."²

The population of London, "by the ordinary proportion of breeding and dying," doubles in sixty-four years, this, however, with the aid of immigration; while the increase in the population of the country as a whole is much slower. The explanation is "that many breeders leave the country, and that the breeders come to London from all parts of the country, such persons breeding in the country only as were born there."³ He calculates further, "according to this proportion, one couple, *viz.*, Adam and Eve, doubling themselves every 64 years of the 5,610, which is the age of the world according to the Scriptures, shall produce far more people than are now in it." His conclusion here is quaint and interesting, if nothing more: "Wherefore the world is not about one hundred thousand years older, as some vainly imagine, nor above what the Scriptures make it."⁴ This great possible increase has been held in check by the hindrances already referred to.

On the basis of his study he gives the following usual advice:

Now forasmuch as princes are not only powerful but rich according to the number of their people (hands being the father as lands are the mother and womb of wealth) it is no wonder why states by encouraging marriage and hindering licentiousness advance their own interest as well as preserve the laws of God from contempt and violation.⁵

¹ P. 69.

² P. 70.

³ Pp. 85 and 59.

⁴ P. 86.

⁵ P. 70.

Graunt is evidently able to see that population has a tendency to increase at a geometrical ratio, but that it is opposed by such "positive checks" as wars and plagues and the like. Of "preventive checks" or prudential motives he has slight conception, probably for the reason that the circumstances at the time, just after the plague, made over-population unthought of and increasing numbers most desirable.¹

The main work of Sir William Petty (1623-1687) which has a direct bearing on population and the one on which his reputation mainly rests, is his *Political Arithmetick, or a Discourse Concerning the Extent and Value of Lands, People, etc.*, first published in London in 1690.² In the first chapter of this work he makes the statement—one rather in advance of his time—"that a small country and few people may, by their situation, trade and policy, be equivalent in wealth and strength to a far greater people and territory." He believes that improved methods in the carrying trades in particular conduce to this. He shows how intensive cultivation may increase the yield of an acre or make the value of its produce twenty times greater than it is, to the great advantage of the country's inhabitants. The increase in numbers, being thus encouraged and made possible, aids in the establishment of greater national strength.

Petty was strongly impressed by the desirability of in-

¹ Cf., for extended general discussion of Graunt's work, Hull, *op. cit.*, vol. ii, pp. 387 *et passim*; and vol. i, pp. xxxiv-liv; see also Godwin's *Inquiry*, p. 174.

² See article in Palgrave's *Dictionary of Political Economy*; Hull's Introduction, *op. cit.*, and an article in the *Quarterly Journal of Economics*, vol. xiv; Bevan's study in *Publications of the American Economic Association*, vol. ii, no. 4; Godwin, *op. cit.*, *passim*; Malthus, *op. cit.*, p. 8, *et passim*.

creasing population. An increase of people he considered the surest sign of advancing prosperity; but he recognized the fact that an addition to the number already existing, in order to be beneficent, must be accompanied by a corresponding increase in the efficiency and productivity of labor and in natural resources. He understood the importance of division of labor in augmenting production. Cloth, he says, must be cheaper when one cords, another weaves, another draws, another dresses, and others press and pack, than when all these operations are performed by the same hand.¹

Like Conring, his German contemporary, he was one of the earliest staunch advocates of genuine religious freedom. He pointed out the evil effects of persecution, which injured and weakened the state by drawing away to other countries many good inhabitants, and by consequently diminishing the revenues. This last drawback is one which he, like all writers with the mercantilist ideas, regarded as of exceedingly great importance. Governmental "tythes increase within any territory, as the labor of that country increases, and labor does, or ought to, increase as the people do;" and the product of this additional labor force enables the country to feed "many mouthes" more than static conditions would allow.

Petty's *Treatise of Taxes and Contributions*,² which appeared in 1662, indicates quite clearly his views concerning the importance of populousness. Populousness had a direct relation to the state's revenues—the more people, the greater the revenues, the stronger and more prosperous

¹ P. 224 (cf. Hull's edition).

² Cf. Locke's *Consideration of Lowering of Interest*, in which he says that numbers of men are better than extent of territory; where there are many hands much work is done and wealth created.

the country. In this *Treatise*¹ he says: "Fewness of people is real poverty, and a nation wherein are eight millions of people are more than twice as rich as the same scope of land wherein are four; for the same governors, which are the great charge, may serve near as well for the greater as the lesser number." The passage does not, however, indicate a very complete insight into the administrative features of government. The remark that punishments should not be such as disable a man for work is based on his general population theory: "Why should not thieves be rather punished with slavery than death?"²

Petty figures the loss due to the plague as follows: "That 100,000 persons dying of the plague above the ordinary number is near seven millions loss to the kingdom; and consequently how well might 70,000 £ have been bestowed in preventing this centuple loss." He adds that some regarded the mortality by the pest as

but a seasonable discharge of its pestilential humours; to clear which difficulty, I say, . . . If the plague discerned well between the well and the ill-affected to peace and obedience or the bees and the drones, the fact would determine the question: but if it destroy promiscuously the loss is porportionable to the benefit we have by them that survive.

That is, he thought that plagues eliminate the fit as well as the unfit, and hence they are to be avoided by all means, for their total effect is weakening.

According to Petty's calculations, which are rather arbitrary in character, but nevertheless in a way quite plausible, population tends to increase at a geometrical ratio,

¹ Pp. 17-18; in Hull, *op. cit.*, vol. i, p. 34.

² *Political Arithmetick*, p. 91.

but the period of doubling varies according to the circumstances—age of the world, existing population, and attendant circumstances. Thus, he calculated that when populousness is general there might be, say, twenty-four births to twenty-three burials, letting about one in every fifty die per annum, this would allow doubling in about twelve hundred years. In intermediate stages of populousness the rate of doubling will be more rapid. Let there be seventy-five births to every six hundred people, with only fifteen burials per annum, leaving a net gain of sixty. At this rate per six hundred people, he says (not with mathematical accuracy, however), the said six hundred people may double in ten years. This indicates a possible variation in doubling periods of from ten to twelve hundred years.

The condition of things in England he regarded as a compromise between these extremes. Referring to "my Lord Hale's *Origination of Mankind*" and other calculations, he wrote:

upon which supposition there must dye 15 per annum out of the above mentioned 600, and the births must be $16\frac{2}{3}$, and the increase one and two-thirds or five-thirds of a man, which number compared with 1,800 thirds of 600 men gives 360 years for the time of doubling (including some allowance for wars, plagues and famine, the effects thereof, though they be terrible at times and places where they happen, yet, in a period of 360 years, and no great matter in the whole nation).¹

He concluded that

If the people double in 360, that the present 320 millions

¹ *An Essay Concerning the Increase of Mankind* (1682), pp. 13-21; found also in Hull, *op cit.*, vol. ii, pp. 463 *et seq.*

computed by some learned mean . . . to be upon the face of the earth, will within the next 2000 years, so increase as to give one head for every two acres of land in the habitable part of the earth. And then, according to the prediction of the Scriptures, there must be wars and great slaughter.

His progressive rate of increase he explains by

supposing the eight persons who came out of the Ark, increased by a progressive doubling in every 10 years, might grow in the 100 years after the flood from 8 to 8000, and that in 350 years after the flood (when abouts Noah died) to one million and by this time, 1682, to 320 millions which by rational conjecture are thought to be now in the world.¹

¹The following is his "table showing how the people might have doubled in the several stages of the world." "It is to be noted," he adds, "that in this table we have assigned different numbers of years for the time of doubling in the several ages of the world."—P. 21.

Period of Doubling.	Year After Flood.	No. of People.
In 10 years.	1.....	8
	10	16
	20.....	32
	30.....	64
	40.....	128
	50.....	256
	60.....	512
	70	1,024
	80.....	2,048
	90.....	4,096
In 20 years.	100.....	8,000 and more.
	120.....	16,000
	140.....	32,000
In 30 years.	170.....	64,000
	200.....	128,000
In 40 years.	240.....	256,000
In 50 years.	290.....	512,000
In 60 years.	350.....	1,000,000 and more.

In the judgment of a writer in Palgrave's *Dictionary of Political Economy*, Sir Matthew Hale's (1609-1676) *Primitive Origination of Mankind* is "not very valuable."¹ From the point of view of the present study it must be said that the work is a notable one. It was published in 1677, the year after the author's death. As a student of population problems, Hale ranks with Graunt and Petty, being far more thorough than his average contemporary. He endeavors by various calculations to prove that every human population is able in a comparatively short period of time to increase very remarkably; he says, in fact, that this increase tends to occur at a geometrical rate, thus directly anticipating by more than one hundred years one of Malthus's propositions. According to his reasoning, a population may double itself in thirty-five years; but as at this rate of increase the number of people would long since have passed beyond the limits set by the means of subsistence, he explained the really comparatively small population as due to the working of certain checks, such as famines, wars, floods, pestilence and earthquakes; and he cited historical instances in support of his assertion. But in spite of all these checks, he said, population does and will increase. A weak point in his work is his

Period of Doubling.	Year After Flood.	No. of People.
In 70 years.	420.....	2,000,000
In 100 years.	520.....	4,000,000
In 190 years.	710.....	8,000,000
In 290 years.	1,000.....	16,000,000 Time of Mcses.
In 400 years.	1,400.....	32,000,000 Time of David.
In 550 years.	1,950.....	64,000,000
In 750 years.	2,700.....	128,000,000 About Birth of Christ.
In 1,000 years.	3,700.....	256,000,000
In 1,300 years.	4,000.....	320,000,000

¹ See art., "Matthew Hale."

failure to draw any definite conclusions from his reasoning. He uses his study to prove his real purpose in writing the treatise, namely, that mankind has not existed from eternity.¹

§ 3. *English Mercantilists.* In Thomas Mun's (1571-1641) famous little essay on *England's Treasure in Foreign Trade*, we discover no attempt to develop a theory of population. The ordinary mercantilist maxim is tacitly accepted, and Mun's allusions to population always make this evident. Like Hale's work, Mun's treatise was published posthumously; according to the title-page, "first published by his son in the year 1664."²

"Pomp and buildings," wrote Mun, "apparel and the like cannot impoverish the kingdom; if it be done with curious and costly works upon our materials and by our own people, it will maintain the poor with the purse of the rich, which is the best distribution of the commonwealth."³ In general, however, he was opposed to luxurious indulgences and "unnecessary wants," especially for goods which are imported:

This great plenty, which we enjoy, makes us a people not only vicious and excessive, wasteful of the means we have, but also improvident and careless of much other wealth that shamefully we lose . . . whilst in the meantime great multitudes

¹ A less important writer, but one whose work, entitled *An Estimate of the Degrees of Mortality of Mankind Drawn from the Tables of the City of Breslaw* (1691), is not unfrequently mentioned by succeeding writers on population, was Edmund Halley (1656-1742). He made use of the mortality records of the city of Breslaw to prove that population tends to continue stationary. Cf. Buffon later.

² Glasgow, 1755, and reprinted in Professor Ashley's *Economic Classics*, New York, 1895.

³ P. 81.

of our people cheat, . . . beg, . . . perish, which by this means and maintenance might be much increased to the further wealth and strength of these kingdoms.¹

He condemned with emphasis the habits "of late years, of besotting ourselves with pipe and pot, in a beastly manner, sucking smoak and drinking healths, until death stares many in the face."

In *A Discourse of Trade unto the East Indies*,² Mun refers to the evil effects of debauchery in increasing mortality. In regard to the lack of prudence, he says, "And thus the number of those is great who, having the charge of wife and children, are notwithstanding altogether without means and artes to procure their maintenance; whereby some of them wanting grace, do run a desperate course and have untimely ends."

The fishing trade should be the recourse of people out of work, "for in that business there is means enough to employ both rich and poor." States which have not sufficient treasure laid up are in difficult straits in time of war:

but a mighty prince, whose dominions are great and united, his subjects many and loyal, his countries rich both by nature and traffique, his victuals and warlike provisions plentiful and ready, his situation easy to offend others and difficult to be invaded, his harbors good, his navy strong, his alliance powerful, and his ordinary revenues sufficient royally to support the majesty of his state, besides a reasonable sum which may be advanced to lay up yearly in treasure for future occasions: shall not all these blessings (being well ordered) enable a

¹ Pp. 98-99.

² Pp. 29-31 (London, 1621); found in McCulloch's *Select Collection of Early Tracts on Commerce*, London, 1856.

prince against the sudden invasion of any mighty enemy, without imposing those extraordinary and heavy taxes? . . . Yea, verily, it cannot otherwise be expected.¹

This seems to be one of the best summaries of the prevalent ideas of national strength, involving as it does "subjects many and loyal."

The above quotation is elucidated by the following one, which indicates a natural realization of the dependence of armies and people on food supplies:

A small state may lay up a great wealth in necessary provisions, which are princes' jewels, no less precious than their treasure, for in time of need they are ready, and cannot otherwise be had (in some places) on the suddain, whereby a state may be lost, . . . for although treasure is said to be the sinews of the war,² yet it is so because it doth provide, unite and move the power of men, victuals, and munition where and when the cause may require; but if these things be wanting in due time what shall we then do with our money?³

In too great plenty and power lurk dangers, says Mun, for as they

doe make a nation vicious and improvident, so penury and want doe make a people wise and industrious:⁴ concerning the last of which I might instance divers commonwealths of Christendom who . . . purchase great wealth and strength by their industrious commerce with strangers, amongst which

¹ Pp. 86-87, *England's Treasure*.

² Cf. Bacon, "Men are the sinews."

³ *Op. cit.*, p. 95.

⁴ An opinion also frequently expressed by his German contemporaries.

the United Provinces of the low countreys are now of fame and note.¹

Samuel Fortrey's (1622-1681) treatise on *England's Interest and Improvement*² is a sophistical apology for the prevailing economic system. Writing in strict accord with the spirit of mercantilism and the English gentry, he says: "Two things appear to be chiefly necessary to make a nation great and powerful, which is not to be over-populous."³ To increase the country's population he would, with but slight restriction, encourage the immigration of industrious foreigners, who should be given the rights and privileges of Englishmen. They would increase the number of people, add to the industrial life and bring wealth with them. To meet the objection that England "has already more people than are well employed," he would have manufactures and other profitable employments encouraged. The establishment of manufactures would lead, by competition, to getting foreign goods for smaller prices and furnishing a "better price and vent" for domestic products.

Enclosures, according to Fortrey, could not check increase, because they made all the remaining land, especially, of greater value, thus adding to the total wealth. "Corn," he says, "would be nothing scarcer by inclosure, but the rather more plentiful, though a great deal less land were filled; for then every ingenious husband would overly plow that land that he found most fitting for it, and that no longer than he found it able to bring him a profit." Since enclosures, then, increase the amount of subsistence, he

¹ *Op. cit.*, p. 100.

² London, 1673; first published in 1603; in McCulloch's *Tracts*.

³ P. 218.

remarks that "how increase and plenty can depopulate cannot well be conceived."¹

We notice no variation from the general type in the views of Sir William Temple (1628-1699).² In his view

The true and natural ground of trade and riches is the number of people in proportion to the compass of the ground they inhabit. This makes all things necessary to life dear, and that forces men to industry and parsimony. These customs which grow first from necessity become with time to be habitual to a country. And wherever they are so that place must grow great in traffic and riches, if not disturbed by some accident or revolution, as of wars, of plagues, or famines, by which the people come either to be scattered or destroyed.

... People are multiplied in a country by the temper of the climate, favorable to generation, to health and long life; or else by the circumstances of safety and ease under the government, the credit wherof induces men over to it, when they cannot be either safe or easy at home. When things are once in motion trade begets trade as fire does fire and people go much where people have already gone.³

In another place Temple says, also: "I conceive the true and original ground of trade to be great multitudes of people crowded into small compass of land, whereby all things necessary to life become dear, and all men who have possessions are induced to parsimony; but those who have none are forced into industry and labor, or else to want."⁴ He gives Ireland as an example of little industry, and

¹ P. 229.

² *Works*, London, 1814, vols. i and iii.

³ *An Essay upon the Advancement of Trade in Ireland*, in *Works*, vol. iii, pp. 2-3.

⁴ *Of Their Trade and of Their Forces and Revenues*, *Works*, vol. i, p. 16a. Both treatises were first published between 1672 and 1680.

consequently of scarcity of people, while Holland is a product of opposite conditions. Holland's populousness, he thought, was, however, also largely due to the "civil wars, calamities, persecutions and oppressions, or discontents, that have been so fatal to most of their neighbors for some time before, as well as since, their stage began."¹

But trade, says Temple, does not always increase a country's well-being, there being indeed "a trade that impoverishes a nation," meaning by this, of course, that which results in an unfavorable balance. This he explains by referring to the case of a peasant who comes to town and continually buys more than he sells, which makes him poorer; with nations it is the same. Unfavorable balances drain a country's strength, *i. e.*, wealth, and hence population decreases or increases but slowly. A nation's strength lies in its wealth primarily and in its people secondarily. This idea, namely, that a people is dependent on wealth (that is, what wealth can procure in provisions of all kinds), Temple did not clearly understand. His mercantilism clouded his senses, as we see from his remark that wealth increases the country's strength and enables the government on necessary occasions to use it to procure mercenaries and not to depend entirely on the citizens for its defense. The social and economic aspects of the problem were subordinated to the commercial. In general, it may be said that he regarded populousness as usually a sign of economic and political welfare, and as a part of his doctrines he would encourage marriage and fecundity by taxing bachelors. He would encourage the immigration of skilled mechanics and artisans.²

A tract bearing the title, *Britannia Languens; or, A*

¹ *Op. cit.*, vol. i, p. 166.

² *Op. cit.*, vol. i, p. 175 *et seq.*; *et passim*.

Discourse of Trade, written by William Petyt (1636-1707), was published in 1680.¹ Though Petyt's is a work of about the same nature as Temple's essays on commercial subjects and other "tracts of commerce," it shows an insight unusual for his time into those aspects of the population problems not directly involved in mercantilism.

Foreign trade, according to this discourse, will advance the values of lands by necessitating a vast increase of people, "since it must maintain great multitudes of people in the very business of trade, which could not otherwise be supported."² Continuing in the usual strain, the author wrote: "Forraign trade, managed to the best advantage, will make a nation vastly stronger than naturally it was, because money and people do ordinarily make national strength."³ By manufactures, too, a nation may support many more inhabitants than it can by simply tilling the soil and raising cattle," and "women and children may ordinarily get good livelihoods in manufacture."⁴ In accord with the prevailing view, he held that the exportation of money, unless carefully watched and compared with what is imported, is apt to make a people "idle and vicious; whereof the further consequence is that the ordinary exportation of money must inevitably depopulate a nation." To this he added that "the odds in population must also produce the like odds in manufacture; plenty of people must also cause cheapness of wages, which cause cheapness of the manufacture; in a scarcity of people wages must be dearer, which must cause the dearness of the manufacture." The statement that a large population will cause a fall in the price of manufactured articles, supple-

¹ In London; found in McCulloch's *Tracts*.

² P. 291 (McCulloch).

³ P. 293.

⁴ P. 300.

mented and probably did not contradict, in the writer's mind, Temple's idea that populousness made the necessities of life dear. Manufactured articles were evidently regarded by Petyt as comforts and luxuries, while Temple apparently referred to agricultural products on which sustenance mainly depends.

In referring to the social and moral aspects of the problem, Petyt declared that effete luxury, quackery in medicine, increase of inns and ale-houses and the like were bad, and bred poverty and created conditions favorable to the development of vice, which necessarily does harm to a country's population, in that it leads to sterility. Production must keep pace with consumption or else conditions are developed which discourage marriage and lead to vice.

Another and well-known writer on commerce at this time was Sir Josiah Child (1630-1699). He published his *New Discourse of Trade* in 1668.¹ His thesis was that population always remains proportionable to trade and industry. His statement that a lack of men will cause a rise in wages, which will in turn, in a short time, lead to a denser population, is one which Adam Smith copied about a hundred years later. In a chapter concerning "Plantation" he laid down the following four propositions:

1. That lands though excellent, without hands in proportion, will not enrich any country.
2. That most nations in civilized parts of the world are more or less rich or poor proportionately to the paucity or plenty of their people, and not to the sterility or fruitfulness of their lands.
3. That whatever tends to the depopulating of a country tends to its impoverishment.

¹ "A new edition," London, 1775, is the one to which the writer has had access.

4. That colonies have not decreased the population of England, as some say they have of Spain.

To prove the first proposition, he cited the instances of Palestine, Granada, and Andalusia, which, though "prodigiously fertile, are all in miserable poverty." The second he thought became evident on observing the prosperity of the populous Seven United Provinces; England, Italy, France and Spain were rich and populous in the order named. The third had to be granted if the other two were, and in order to obtain great populousness he advised good general laws, as well as good laws relating to industry and trade. In regard to the fourth, "As every one knows, New England was originally inhabited, and hath since successively been replenished, by a sort of people called Puritans, . . . and had there not been a New England found for some of them, Germany and Holland probably had received the rest; but Old England, to be sure, had lost them all." Virginia and the Barbados were first peopled, he says, "by a sort of loose, vagrant people, . . . who probably could never have lived at home to do service for their country, but must have come to be hanged, or starved, or died untimely of some of those miserable diseases that proceed from want or vice."¹ In this view Malthusianism is in some measure anticipated.

In a tract bearing the title, *England's Great Happiness, etc.*, published anonymously in 1677,² the following passage occurs:

You cry up the Dutch to be a brave people, rich and full of cities, that they swarm with people as bee-hives with bees;

¹ P. 171 *et passim*.

² In McCulloch's *Select Collection of Early English Tracts on Commerce*; see p. 263.

if a plague come they are filled up presently and such like; yet they do all this by inviting all the world to come and live among them. You complain of Spain, because their inquisition is so high, they'll let nobody come and live among them, and that's the main cause of their weakness and poverty . . . Will not a multitude of people strengthen us as well as the want of them weaken Spain? Sure it will.

McCulloch thinks there is little in the tract which would need mending, "except, perhaps, the style."¹

Sir Charles Davenant (1656-1714) is the last of the more important English mercantilists of the seventeenth century whose works we shall treat. His *Discourses on the Publick Revenues* and on the *Trade of England* were published in 1698.² In the main, he was in harmony with current notions, but he is distinguished by greater moderation than was usual. He wrote, for example, that "the wealth of all nations arises from the labor and industry of the people; a right knowledge, therefore, of their numbers is necessary to those who will judge of a country's power and strength."³ He made a shrewd guess that "the sin David committed in numbering Israel might probably be this, that it looked like a second proof of rejecting theocracy to be governed by mortal aids and humane wisdom."⁴ He held that it was not sufficient, however, to know the bare numbers; the character of the people as regards its employment must also be known, and their material resources and capabilities must be considered.

A nation might be "impoverished by bad government,

¹ McCulloch's *Select Collection of Early English Tracts on Commerce*, p. x.

² See his *Works* published in London in that year.

³ Vol. i, p. 17.

⁴ *Ibid.*, p. 18.

by ill-managed trade, or by other circumstances"—facts which were generally recognized. Such conditions would cause

the interest of money to be dear and provisions to be low; rents will everywhere fall, lands lie untilled, and farmhouses will go to ruin, the yearly marriages and births will lessen and the burials increase, . . . and the inhabitants will gradually withdraw themselves from such a country.

But where the lower classes were well-fed and clothed and fairly well at ease, as in England most of the time, they would propagate and increase rapidly. He estimated that before 1700, England had doubled in population about every four hundred and thirty-five years, and that the next doubling to eleven million would then not take place until about six hundred years later, or until the year 2300. The net annual increase in his time he figured at nine thousand out of a total of twenty thousand. This reduction from the total to the net increase was due primarily to four causes: (1) plagues and mortalities; (2) foreign and civil wars; (3) sea accidents; (4) emigration to plantations.

Many other things were also of detriment to numerical increase. Large cities tended to increase more slowly from births within their limits than country districts, if indeed they increased at all. London would even have decreased by about two thousand per annum had it not been for newcomers; because, though the proportion of "breeders" was larger in cities, the inhabitants were shorter-lived and each urban marriage produced fewer children than a rural one. These conditions were due, first, to "the more frequent fornications and adulteries;" secondly, the "greater luxury and intemperance;" thirdly, "the greater intenseness in business;" fourthly, "the un-

healthfulness of the coal smoak;" fifthly, "the greater inequality in the ages between husbands and wives;"¹ sixthly, the shorter duration of life in cities as compared with the country. In most of this, as will be noted, only a restatement of current opinion is found, with but slight modifications.

To promote population—and, of course, his point of view being national, this meant in England—civil liberties should be guarded and "the legal constitution firmly preserved." Immigration should be encouraged, for

An accession of strangers well-regulated may add to our strength and numbers; but then it must be composed of laboring men, artificers, merchants and other rich men, and not of foreign soldiers. . . . All armies whatsoever, if they are large, tend to the dispeopling a country, of which our neighbor nation is a sufficient proof, where is one of the best climates in Europe. . . . For children do not proceed from intemperate pleasures taken at random, but from a regular way of living.

Marriage should be encouraged, says Davenant, as it was among the Jews and the Romans; no "fine" should be laid "upon the marriage-bed," as was really the case in England. Such fines or taxes discourage marriage and hinder propagation among the working classes. Influenced probably by the recent French example, he held that privileges and exemptions should be granted as rewards for producing many children. Since males and females, in his estimate, were in the proportion of about twenty-eight to twenty-seven, or about equal, polygamy should always be prohibited, as contrary to the "law of

¹ Vol. i, pp. 15-35, *An Essay on the Probable Methods of Making a People Gainers in the Balance of Trade*.

nature." Measures should be taken to prevent illegitimacy, as it is a part of vice, which is not favorable to marriage or increase.

Daniel Defoe (1661-1731) is a most ardent supporter of the idea that trade makes a country flourish, and increases population and national strength.¹ "Now, whence is all this poverty of a country?" queries Defoe.

'Tis evident 'twas want of trade and nothing else . . . Trade encourages manufacture, prompts invention, employs people, increases labor and pays wages . . . As the number of people increase, the consumption of provisions increases. . . . As the consumption of provisions increases, more lands are cultivated. . . . In a word, as land is employed the people increase of course and . . . the prosperity of a nation rises and falls just as trade is supported or decayed.²

People must have provisions, and the demand for them causes trade; so that trade increases population and growing population increases trade.³ In the following passage is a vague statement of Adam Smith's later proposition that the demand for men necessarily increases the supply of men.

'Tis by their multitude, I say, that all wheels of trade are set on foot, the manufacture and produce of the land and sea are finished, cured and fitted for the markets abroad; 'tis by the largeness of their gettings that they are supported, and by the

¹ See especially *Extracts from a Plan of English Commerce, being a Compleat Prospect of the Trade of This Nation*. Second edition, London, 1730; reprinted in McCulloch's *Select Collection of Scarce and Valuable Tracts on Commerce*, London, 1859.

² *Ibid.*, pp. 112-113.

³ *Ibid.*, p. 114.

largeness of their manufacture the whole country is supported; by their wages they are able to live plentifully, and it is by their expensive, generous, free way of living that the home consumption is raised to such a bulk, as well of our own, as of foreign production, if their wages were low and despicable, so would be their living; if they got little, they could spend but little and trade would presently feel it.¹

Prosperity thus depends upon wages and employment, and on well-being depends the increase of numbers.

A full state treasury was, in Defoe's view, of greater importance than mere numbers of men, especially in time of war. He says: "If they have more money than their neighbors they shall soon be superior to them in strength, for money is power, and they that have the *gelt* (as the Dutch call it) may have armies of the best troops in Europe and generals of the greatest experience."² But since the treasury is dependent on prospering commerce, and trade and people are mutual supports of one another, trade should by all means be encouraged and the welfare and employment of the people firmly established.

Another writer—whose theories of trade are arguments to prove the dependence of population especially on foreign trade—is William Richardson. One of the worst effects of the decline of trade is that it decreases the "stock," or number, of people.

For as employment lessens, the most industrious rather than starve here will fly to other countries, where trade can maintain them; so the consumption of these being taken away, the market at home must grow less, and of course rents must fall;

¹ McCulloch's *Select Collection of Scarce and Valuable Tracts on Commerce*, p. 140.

² *Ibid.*, p. 136.

yet the farmers' charges must grow greater, for the fewer the hands, the higher the wages are.¹

He continues: "This must in the end break him [the farmer] and produce all the consequences following that misfortune." This makes his former statement more plausible; for in this way, he says, pauperism would necessarily be increased and others would suffer greatly.

A populous country is desirable, for "'tis men that trade that bring in money; therefore, the fewer they are, the less money will be brought in, and the less money the less rent can be given for land." To remedy such bad conditions as check increase, and in consequence general welfare, he makes five proposals: (1) to lay a tax on consumers of luxuries and to make all ports free; (2) to abolish monopolies;² (3) to withdraw bounties on exported grains and to erect public corn magazines in every county; (4) to discourage idleness; (5) to pay off the public debt as fast as possible or to change its form. The most important of these was his proposal to establish free ports, by which he means the right of importation or exportation of goods "without paying customs or fees." This would bring foreign merchants and others to England, for they will "settle where business can be transacted with so little trouble." These would furnish more employment for the poor and increase domestic as well as foreign trade, and the whole would "increase the stock

¹ See *An Essay on Causes of the Decline of Foreign Trade, etc.*, London, 1744; reprinted by McCulloch, *op. cit.*, pp. 212 *et seq.* It should be remarked that "the authorship of this work has been questioned even to this day. By some it is ascribed to Richardson, by others to Decker, with the probabilities in favor of the former" (Seligman, *Incidence of Taxation*, second edition, p. 57).

² Cf. Adam Smith.

of the people." Employment being thus given to the poor, they would not only be prevented "from deserting the country, but would be preserved from want and disease, consequently from death; by their industry they will procure themselves a comfortable maintenance, and thereby be enabled to marry and raise families." In his opinion the abolition of monopolies would lead to many benefits, among which would be that

it will increase the stock of people. This is a consequence of encouraging trade and employing the poor, as has been proved before; to which may be added that all times of scarcity produce distempers which carry off great numbers of people, whereas this will prevent that calamity, consequently preserve many lives; and the better the means of living are in any country, the more people will be drawn in to partake of them.

§ 4. *Some Other English Writers.* For the sake of convenience we shall group together a number of writers in the same section, though there is no apparent connection between the writings of any two of them either in regard to method or content. Dugard discusses the problem from the personal standpoint. Bishop Cumberland's work is theological, but based on mathematical calculations. De Mandeville's is a case *sui generis*. Bishop Berkeley's essays revert to typical mercantile remedies for depopulation.

Samuel Dugard's (1645?-1697) little book, *Περὶ Πολυπαιδίας; or, A Discourse Concerning the Having Many Children*, appeared in 1695. The typical objections to this, he says, may be summarized under five heads: (1) the hindrance that many children are to great undertakings; (2) a free and generous way of living may thereby be "maimed and cut short;" (3) the anxieties of parents; (4) the afflic-

tions that arise because some among many "will not prove well;" (5) the danger of a man's "name sinking into meanness by reason that where there are many children there is no likelihood that a plentiful provision can be made for them all;" also,

where there are more brought into a miserable world, larger food is thereby afforded unto Death; which things were looked upon to be either so ill in their nature or so deplorable in all their prospect that they were thought a plea strong enough for an abstinence even from marriage and the procreation of children.¹

In these sentences many of the most important details of the Malthusian position are explicitly stated, but, strange as it may seem, Dugard was so enthusiastic in his approval of populousness that he considered them scarcely worthy of reply. Instead he made several counter-propositions, to the effect that children are a blessing and a strength; that the begetting of children was honored in ancient times and sanctioned by God, in Genesis and elsewhere. And, like Luther, he declared that God will not send more mouths than may be fed with the bread he sends. His arguments are then either sentimental or religious. It seems strange that a writer with an evidently keen insight into certain phases of this problem of population as related to happiness should in his ardor so pervert his reason as to fail to appreciate in some degree the importance of prudence.

Richard Cumberland's (1631-1718) speculations are contained in the volume entitled, *Origines Gentium Antiquissimae; or, Attempts for Discovering the Times of the First Planting of Nations*.² His estimates of ancient popula-

¹ Pp. 7 *et seq.*

² London, 1724; see especially Tract iv, *Concerning the Possibility*

tions are founded mainly on Biblical data. His work is of no value *per se*, except for the fact that it forms in a way a link between Petty, Graunt and Hale and the later writings of Hume and Wallace, which in turn furnish suggestions for Price, Wales and Howlett in the last part of the century, culminating in Malthus' *Essay* and formulæ. Cumberland comes to the absurd conclusion that within three hundred and forty years after the Biblical flood there were about 3,333,333,330 people living in the world. To account for discrepancies and decreases, he dwells upon the influence of famines and wars. Without such restraining factors the increase of mankind would be, in long periods, almost incalculable.

William Derham's (1657-1735) *Physico-Theology; or, A Demonstration of the Being and Attributes of God* (1713), reminds one of Suessmilch's *Göttliche Ordnung*, which appeared some thirty years later. In a chapter on "The balance of animals, or the due proportion in which the world is stocked with them," he said:

of a sufficient Increase of Men from the three Sons of Noah to a Number large enough to found all the Nations mentioned in the oldest credible Histories. Cf. William Whiston's A New Theory of the Earth, London, 1725; he thought that before the Deluge population had increased at a geometrical progression, but that unfavorable circumstances of various kinds had since reduced the total number of people in the world to a mere fraction of its former size. The work is amusing, but of small value. William Maitland published a History of London in 1739; it is of some value to the antiquarian, but not for the purpose of the present writer. Abraham Moivre's Annuities upon Lives or Valuation of Annuities appeared in 1726, and a similar work, Theodore Simpson's Doctrine of Annuities and Reversions, was published a few years later. Leonard Euler's Recherches sur la Mortalité et la Multiplication du Genre Humain also had special reference to life insurance, but was of some use to writers on population. James Hodgson published The Valuation of Annuities, etc., in 1747.

The whole surface of our globe can afford room and support only to such a number of all sorts of creatures; and if by their doubling, trebling, or any other multiplication of their kind they should increase [out of proportion to their means of subsistence] they must starve or devour one another. The keeping, therefore, the balance is manifestly the work of the divine wisdom and providence.

What is true in regard to other animals, in this instance is also true concerning man and his possible increase.

Bernard de Mandeville (1670?-1733), in a somewhat naïve and amusing way, shows that he had a broad conception of the growth of population. Society was originally necessary that men might protect themselves from wild animals. There is a very strong tendency in the human being, as well as in other animals, to increase. This increase would in a short time become excessive if it were not for physicians and apothecaries(?!), wars by sea and land, wild beasts, hanging and drowning, and "an hundred casualties together." These retarding influences, with sickness and want, "are hardly a match for one invisible faculty of ours, which is the instinct which men have to preserve their species." Nature has wisely provided against the greater mortality of men, due especially to war, in giving birth every year to more males than females. He said he based this statement on the "Bills of Births and Burials in the City and suburbs."¹ Obviously de Mandeville realized that population is checked in its increase by various means. His statement is not full, but it contains the essential ideas of more recent population theories.

George Berkeley (1685-1753), in his *Essays towards*

¹ *The Fable of the Bees* (London, 1706), pt. ii. See vol. ii, pp. 280 et seq., London edition, 1739.

Preventing the Ruin of Great Britain,¹ says that the number of people is both a means and motive to industry, and the state should therefore be interested in nothing more than in the production of many competent citizens. The people should be encouraged to propagate, "by allowing some reward or privilege to those who have a certain number of children; and, on the other hand, enacting that the public shall inherit half the unentailed estates of those who die unmarried of either sex."² Industry is the "natural and sure way to wealth; this is so true that it is unnecessary for industrious people to want the necessaries of life."³ Berkeley simply follows the prevailing view, with the one exception that he would let the state inherit half the unentailed property of unmarried women as well as of bachelors. He apparently fails to appreciate the fact that all people, however willing, are seldom able to find employment by which they may supply their needs. He speaks of frugality⁴ of manners in living, which is "the nourishment and strength of bodies politic." It is by frugality that they grow and subsist, until corrupted by luxury, the natural cause of decay and ruin. He agrees with Bacon and Macchiavelli that strong men, and not money, are the true sinews of war and a nation's strength in times of peaceful industry.

§ 5. *De Witt, Spinoza and Ustariz.* Though different in nationality and method, these three writers agree thoroughly regarding population as the king's or the state's mainstay and strength.

In the work on the *True Interest and Political Maxims of the Republic of Holland*, written partly by the Dutch

¹ Published in 1721; see *Works*.

² P. 67.

³ P. 69.

⁴ Cf. Temple's "Parsimony."

statesman, Jan de Witt (1625-1672),¹ we find a good description of the commercial policy of that prosperous country in the later part of the seventeenth century. Though accepting the general principle of mercantilism in its relation to population, de Witt declared that it was necessary that populations should be free politically and religiously, and they should not be made to suffer from bad economic institutions, such as "monopolizing companies and guilds." These would be particularly prejudicial to Holland's interests. He did not ignore the fact that a people is dependent on the amount of the available means of subsistence. In the case of Holland, he says that commerce, trading, fisheries and colonial enterprises must be fostered, for without these aids the country could not adequately support its population.² Since the country did not rely on its own food products for maintenance, the population and wealth of the state should be continually and concurrently increased by encouraging fecundity, and the immigration of all people who wish to engage in productive enterprises. Nothing should be done to weaken the four great pillars of Dutch society; namely, manufacturing, fishing, traffic and freighting of ships; they should especially not be weakened by any form of taxation. "All inhabitants who seek their profit and livelihood from other countries ought more to be favored than those who in this country live on their fellow-inhabitants;" that is, those engaged in foreign trade should enjoy greater privileges than those engaged in domestic business.

¹ Translated by John Campbell, London, 1746. Professor Seligman remarks that the real author of the *Maxims* was Pieter De la Court, though De Witt did write one or two chapters. "The original Dutch edition was published anonymously in 1662." See *The Shifting and Incidence of Taxation*, second edition, p. 34, note.

² Chapters v-xvi.

Baruch Spinoza (1632-1677) discusses the importance of population briefly in his *Tractatus Politicus*.¹ In his general political philosophy and in its application to the present subject he stands in a certain relation to Macchiavelli and to Hobbes, and in general it may be said that he belongs to that English school of publicists of the time whose spirit was continued later by Bentham and Austin.² He is related also to the natural-rights movement. Concerning the meaning of a population to the state he takes the usual and, when properly understood, quite correct opinion: "Nam imperii et consequenter jus civium numero aestimanda est."³ The strength and welfare of a state depend on its numbers and territorial extent, and on its wealth, industry and freedom; these are its best defense against internal dissensions and external foes.⁴

A work not unlike that of de Witt was that written by the Spaniard, Don Geronymo de Ustariz (died 1750), the *Theory and Practice of Commerce and Maritime Affairs*.⁵ Some people said that Spain had been losing people. If

¹ *Opera* (edition, Bruder), vol. ii.

² Cf. Sir Frederick Pollock, *Spinoza, His Life and Philosophy*, p. 309.

³ *Tractatus Politicus*, chap. vii, § 18.

⁴ Cf. chap. vii, § 16: "Quod cives eo potentiores, et consequenter magis sui juris sint, quo majores urbes, et magis munitas habent, dubio caret: quo enim locus, in quo sunt, tutior est, eo libertatem suam melius tueri, sive hostem externum, vel internum minus timere possunt, et certum est, homines naturaliter securitati suae eo magis consulere, quo divitiis potentiores sunt. Quae autem urbes alterius potentia, ut conserventur, indigent, aequale jus cum eo non habent; sed eatenus alterius sunt juris, quatenus alterius potentia indigent. Jus enim sola potentia definiri in 2 cap. ostendimus." Chap. ii, § 18: "Hoc jus, quod multitudinis potentia definitur, imperium appellari solet."

⁵ Translated by John Kippax, London, 1751. It was first printed in Spanish in 1724, but was destroyed and then reprinted in 1742.

this, perchance, were true, he advised that the poor laws should be changed and idlers made of use and profit instead of being a source of expense, and that orphans should be employed to prevent their perishing from want. When trade began to flourish and people were sure of employment, large numbers of Catholics from abroad would come to the country, and they, by intermarrying, would surely and safely increase the number of inhabitants. The continued progress of manufactures and commerce was the means which would best insure the increase of people and wealth, as was proved by the cities of Holland, especially Amsterdam.¹

He did not think that colonies had depopulated Spain, for those parts of the country which had sent most away were still growing and remained the most populous.

The very persons that passed over to the Indies were for the most part children, or destitute of fortune and a decent livelihood, and incapable of maintaining a family and might never have married in these kingdoms, . . . and had they remained at home and married both themselves, their wives and children were in danger of perishing for want; so that they would leave behind them little or no posterity.²

A prime reason why legislators should have a care for the welfare and employment of the people was that a negligent policy would produce a diminution in revenues, for the people would not be able to buy and consume such articles as "flesh, wines, oils, " *etc.*, on which the principal taxes were laid. He referred approvingly to Vauban's *Dixme Royal*, to Scriptural passages favorable to increase and to the Roman laws on marriage. Finally, he

¹ Chapter xi.

² Chapter xii.

held that taxes should not be levied on the necessities of life, but on things that served as luxuries or curiosities, or for "ornament and pomp." He objected, moreover, to the oppressive practices of the tax collectors; "for oftentimes they lay heavier burdens than the revenue itself."

§ 6. *Some Typical Writers in France.* In this group we have placed the great bishop Bossuet and three economists classified by Daire as financiers. The spirit of mercantilism or nationalism runs through the writings of them all.

Jaques Bénigne Bossuet (1627-1704) discussed the subject very concisely in a work entitled, *Politique tirée des propres Paroles de l'Ecriture Sainte*.¹ In strict accordance with the title of the treatise he says little that is original, but refers to the Bible to show that great populations are to be desired, and when once obtained, to be preserved by means of good laws and institutions.² He says that "the true riches of a kingdom are its men," and in the following section advocates certain means of augmenting their number. The prince should hate all idleness, for it will corrupt the morals of his people and result in brigandage. It produces pauperism, which should be banished from a well-governed state. To rid a state of mendicancy it is necessary to find employment for all who can work; this should be the aim of governors. It is especially necessary to encourage marriage, to make the education of children happy and easy, and to check all illicit unions.³ God

¹ In *Oeuvres*, Paris, 1852, vol. i, p. 457.

² "Concluons donc, avec le plus sage de tous les rois: 'La gloire du roi et sa dignité est la multitude du peuple: sa honte est de le voir amoindri et diminué par sa faute.'"

³ "La fidélité, la sainteté, et le bonheur des mariages est un intérêt public, et une source de félicité pour les états."

favorable and blessed the fruits of legitimate marriages, and it was man's duty to teach his offspring modesty and frugality and to teach them a reasonable mode of conduct, for in all this lay the great foundation of riches. Thus we see that Bossuet's ideas are expressed in religious phrases, and though in agreement with state ambition, they are not extreme, and in so far as they treat the matter, quite reasonable.

The Maréchal de Vauban (1623-1707) makes his position clear in his well-known *Essay for a General Tax or a Project for a Royal Tythe*.¹ The king's revenues, says Vauban, ought to be distinguished from those of his subjects, though they all come from the same fountain. It is well known that it is the people who cultivate, gather, and keep together the king's resources; the duties of his officers are simply to impose and collect the revenues.

And, therefore I think it were more proper to say that the providence of the soil, of trade and of industry is the rent and income of the people, and people are the true revenues of the king; it being from them that princes draw all their revenues and it is them they dispose of and employ in all their affairs. It is the people that pay and do everything, and who freely expose themselves to all manner of danger for the preservation of the life and wealth of their prince. Their heads, hands and legs are all employed in his service; nor can they marry and get children without bringing evident advantage to him; for thereby an addition is made to the number of his subjects. . . . What makes it the more the king's interest to use them well, is, that he is their king and his happiness and prosperity are so indispensably and insepar-

¹ English edition, London, 1710; found in Daire's *Économistes Financiers* as *Projet d'une Dixme Royale*; first edition, 1707.

ably linked to their welfare that nothing but death can separate them.¹

A writer in whose work interest is reviving among students of political economy in France is Le Pesant de Boisguillebert (1646-1714).² In the first chapter of his *Détail de la France* he says that the wealth of every country is in proportion to the fertility of its territory, which enables a population to gain a sufficiency of the necessities of life. In the following chapter he states that one of the main reasons for the power of France is that there are all sorts of these necessities in abundance, whereas in some neighboring countries such favorable conditions are not always to be found. Those countries are therefore compelled to buy of France, while the latter country is in no such position of dependence; this results, of course, in a good balance, which accounts for France's affluence.

In the first part of a *Traité des Grains*, Boisguillebert shows how the working classes are made happy or miserable as the prices of produce are high or low. His argument here does not, however, take into full consideration all the phases of the problem. Of course, it is clear that if the peasant lives mainly on his own produce and the price of that surplus which he sells is high, he is better off than if the price were low. Such considerations should lead the government so to regulate the commerce in grains that the price remain at a satisfactory level. Among the means available to accomplish this, Boisguillebert mentions

¹ P. 175.

² Says Daire (*op. cit.*), p. 157: "Boisguillebert est le premier anneau de cette chaîne de savants qui s' est formée successivement, jusqu' à nos jours par les noms illustres de Quesnay, de Smith, de J. B. Say, de Malthus, de Ricardo et de Rossi."

the encouragement of the foreign export trade, besides various domestic arrangements. This is of direct importance to the government as such and not only to peasants, for unless the poor have the necessities of life they cannot contribute so much to the nation's strength or to the national treasury as they otherwise would. Free exportation should be permitted except on extraordinary occasions.¹ Famine is often largely attributable to a low price for agricultural produce, under French conditions. The exportation of grains and foodstuffs does not cause a lack of supplies at home, for their value with a profit is received in return. From the fall of Adam it has been necessary for man to work that he might eat, and recognizing this the government should make such laws as make employment as easy as possible to secure.²

Though Boisguillebert's arguments often lack completeness, it must be said that he displays a greater sympathy with the people and knowledge of their problems than other French writers up to his time.

John Law (1671-1729)³ held that commerce and trade depend on money, and the increase or diminution of the number of individuals depends in turn on trade and commerce. If there be too much commercial activity in proportion to the number of "effective individuals," more people are attracted to the places or countries where such conditions are to be found. Domestic trade is of importance, but foreign commerce is the most decisive factor

¹ Seconde Partie.

² Cf. *Dissertation de la Nature des Richesses*, chaps. iii and v (Daire, *op. cit.*).

³ He was born in Edinburgh and died in Venice, but as his life and activities centered in France, the writer has preferred to place him among the French "financiers."

determining general welfare, and consequently the number of people possible. It is bad for a nation to buy dear and sell cheap. Law's ideas in general may be said to be in harmony with the commercial policy of the time; but his views on population are a little too much involved with his chimerical monetary theories to be very clear. His real conception of the matter was probably simply this, that wealth, including sufficient means of subsistence, would enable a people to increase by immigration as well as by propagation.¹

§ 7. *Fénélon, Melon and Cantillon.* In spite of their differences in other respects, these writers may properly be classed together in their appreciation of the dependence of people on the food supply, and in their partial rejection of the old ideas concerning the superior importance of industry and trade and their emphasis on the importance of labor and land.

The famous poet François de Fénélon, archbishop of Cambray (1651-1715), embodies his views on population, as on so many other matters, in poetical form in the *Tele-machus*. To increase the number of people was in his mind of supreme importance; but this increase was possible only in so far as the country could provide subsistence.² To encourage marriage he advised the king to

¹ See his *Money and Trade*, p. 16 (London, 1720); found also in Daire, *op. cit.*, p. 455.

² Cf. the following lines from the Rev. John L. Ross's blank verse translation:

And to augment their numbers bend thy thoughts
New unions to promote. The kingly power
Is not distinguished by a realm's extent,
But subjects' numbers, and their jealous care
T' obey their monarch. A domain though small
Obtain but fertile.—(Lines 121-126.)

lessen the taxes. He says that most men desire to marry, and that poverty, due always to a variety of circumstances, is the main hindrance to it and to increasing population. His opinion seems to be that though subsistence fixes limits to increase, yet this limit is not stationary, and may always be extended by improving the laws and by governmental regulations designed to relieve the condition of the masses, particularly of the peasants. His optimism was not of a very searching kind, however, for he remarked that if laborers were relieved from excessive taxation they would be able to support their wives and children, "for the earth

Are these two things—

A numerous people and well-cultured fields

For their support—not justly to be viewed

As the essential basis of thy power?—(Lines 107-110.)

Next their numbers ascertain,

And what proportion commonly is borne

By husbandmen. We then must needs enquire

The amount of corn, wine, oil and other fruits,

The produce of your lands in average years;

Hence we shall information shortly gain

Whether your country can subsist with ease

All its inhabitants, and further yield

A surplus to maintain a proper trade

With foreign countries.—(Lines 560-568.)

Let us, therefore, now withdraw

All the superfluous craftsmen from the town,

. . . And them employ these barren plains and hills

To cultivate.—(Lines 842-846.)

. . . Thus, in course of time,

The whole unoccupied lands will teem

With vigorous families—tillers of the soil.—(Lines 880-882.)

The *Telemachus* was forbidden publication by the king, who was offended by what he regarded as too personal allusions; but it was surreptitiously published in Paris in 1699 and in The Hague in 1701. The title-page informs us that it was originally intended for the use of "H. R. H., the Duke of Burgundy, Dauphin of France."

is not ungrateful." In his mind the two most important things in this connection were industrious habits and low taxes. He did not think, as did so many, that easy circumstances would corrupt the people; for an abundance would be speedily reduced by increased numbers of marriages and the inducements to offspring. This would have the effect of spurring laborers again to the struggle for existence, or, as he puts it, "to supply their frugal needs," which would check profligacy. In regard to possible over-population he considered colonization a convenient resource; and colonies would "extend the sovereign power and limits of the state."¹

We observe in Fénelon's lines most, if not all, of the fundamental ideas of the modern population doctrine, especially as seen in Malthus and Ricardo. Population tends to increase when not checked by poverty or circumstances which bring into operation the "preventive check." An increase in prosperity is soon rendered safe, for laborers will increase to the point where want drives them to work. In this we have the germ of the "iron law" of wages.

The *Essai Politique sur le Commerce* of Jean François Melon (died 1738) was published a number of years after Fénelon's death, in 1734. In it the author speaks of the effects of monastic orders on population, which he considered, on the whole, detrimental. Though he would not prohibit their existence, he thought it would be well to prevent persons by law from entering them and taking vows of celibacy before their twenty-fifth year.² In times of peace it was not possible for citizens to engage in the business of soldiers, and since the policy of the country

¹ Cf. lines 883, 944 *et seq.*, 986 *et seq.*, 1010-1027 and 1038-1042.

² Chap. iii, *De l'Augmentation des Habitants*.

was against idleness, the state should so regulate matters that all could obtain employment either in manufactures or in agriculture. When this was not practicable the surplus, or that part which tended to remain unemployed, should become seamen; some could go to colonies. He held it to be better policy to encourage marriage, to provide some assistance for fathers of numerous families, and to rear orphans and foundlings than to engage in conquests; war is more expensive than systematic internal improvement. "To demand a living without working is a crime, because it is a continual robbery of a nation," and mendicancy should not be tolerated.

But while Melon considered it desirable that a country should have as many people as it could support, he realized the possibility of over-population. In his sense of the term, over-population is simply the inability of the country to provide that subsistence which is necessary for life. Where comforts and luxuries are common there is no excess of people. In speaking of the "peoples of the north," he says that their institutions favored fecundity to such an extent that they finally increased so greatly that they were obliged to leave their native climes for the sake of nourishment. They were dependent almost solely on the soil for support, and had no extensive trade and industries to aid them. Intensive cultivation of land and careful industry would enable a country to support a larger population than at first glance might seem possible. Switzerland was an example of what wise policies and diligence could do for a people.¹

Richard Cantillon's (1685?-1734) *Essai sur la Nature du Commerce en Général* was probably first published

¹ The *Essai* is found in Daire, *op. cit.*; see pp. 674-677 especially.

after the author's death.¹ His main thesis regarding the increase of population is stated thus in the title of the fifteenth chapter of this work: "La multiplication et le décroissement des peuples dans un état dépendent principalement de la volonté, des modes et des façons de vivre des propriétaires."

The earth, is the source or matter from which we derive all riches; the work of men is that which gives form to the produce; and riches itself is nothing else than the nourishment, conveniences, comforts and luxuries of life.²

Cantillon states explicitly that the number of laborers, artisans and others who depend on their work for a living is naturally proportionate to the need of them.³ He explains the dependence of men on subsistence by taking village conditions as a basis. If the laborers in such a village rear many sons and some of these sons do not find other means of employment than those of their parents, there will soon be too many laborers for the cultivation of the land, *etc.*, on which the village depends. It will be necessary then for some of the superfluous adults to go elsewhere in search of a living. If they try to remain with their kinsfolk they will either not marry for lack of means, or if they do marry, their children will perish miserably and they themselves will suffer by hunger, as is seen daily in France. On account of the inevitableness of such effects, he believed that villages, and consequently the country, always increase slowly, unless the means of subsistence are abnormally increased for some time. The number of people

¹ Reprinted for Harvard University, Boston, 1892. Cantillon was born in Ireland. See *Dictionary of National Biography*.

² Pp. 1-2.

³ Cf. *Wealth of Nations*, Bk. i, chap. viii.

tends to equal, to press on, the means of subsistence.¹ And it is so with plants and animals; they would increase indefinitely were it not for the limits set by room and nourishment. In China the number of people is incredibly large, but when they have an unfruitful year they die of hunger by the million.

"All classes and all the people of a state subsist and are enriched through the proprietors of lands." There is no one except the king and the proprietors who can live in independence; all the rest are either workers or *entrepreneurs*. If the king and the proprietors did not rent their lands and permit men to work no one could obtain food or clothing. Thus, in his view, the increase of the people in a state like eighteenth-century France "depends principally on the will and habits of the proprietors." Proprietors should, then, enable peasants to marry while young and to raise children by promising them land and work by which they can support families, and "without doubt the people will multiply as long as the land continues to support them." Men will marry young when they know they can support their wives and offspring; if they married otherwise they would suffer hunger, disease and death.

Cantillon's work is perhaps as good an example of careful study of economic conditions as can be found among French writers up to his time. In his discussion of the population problem he is unquestionably superior to any of his predecessors or contemporaries in France.²

¹ Chap. ix and chap. xv.

² A. Deparcieux (1703-1768) is of only indirect importance in this study. His *Essai sur la Probabilité de la Durée de la Vie Humaine* appeared in 1746. It has been of some value and is known mainly because of the results he obtained from his investigations of the mortality records of a French province and a Roman Catholic order.

§ 8. *Conclusion.* The common characteristic of writers in England and France in this period appears to be the fact that practically all look at the masses as so many possible breeders of human kind, almost as if they were so many animals whose owner would naturally be enriched by their increase. This is especially apparent in all strongly national writers, who desired the largest population possible and who attempted to formulate practical plans for realizing their ideal. The writers themselves were, of course, removed, sometimes far removed, from the sufferings and experiences of the peasants and the proletariat, so that it is not often that a sympathetic and, at the same time, intelligent appreciation of their lot is expressed. Let the people increase; they will be kept busy by the force of circumstances; if not, they will starve.

It is not maintained, however, that humane considerations were quite disregarded. Governments should by all means seek to prevent want. It was regarded as not only desirable, but imperative that provision be made for the employment of all. The most practicable resource was in the development of foreign trade. In this, however, not the least sympathy for other peoples is shown. Compared with modern ideals, the nationalist attitude was supremely selfish. Thus there arose the economic struggle for subsistence and survival among the growing nations. This was the matter of overwhelming importance; on it depended the well-being of the individuals in any given state or society. The balance-of-trade theory was a natural part of the equally natural egoism which made each nation consider its own preservation and preëminence of more importance than that of any other. Of the welfare of mankind as a whole, and not the English or French or other part of it, there was no discussion. The underlying doctrine was, either tacitly or explicitly, that the nation which

became the strongest in material goods and in men would survive; the nations which lost in the economic struggle would have their populations reduced by want, or they would be forced to resort to war, in which their chances of success would be small. The war, however, would kill many and make the condition of the survivors more tolerable.

There was, then, even among the most ardent supporters of mercantilism, an understanding of the importance of food supplies and of the other necessities of life. Probably in all the writers reviewed there was a realization (though this was not always expressed) of the limits thus placed on increase. Often the limit was not clearly defined; indeed, it was generally regarded as more or less elastic. Greater industry, more intensive cultivation of land, better trade regulations were always possible as well as desirable, and they enabled more people to find employment, obtain wages, subsist and propagate their kind. Herein lay the importance of wise governmental regulation. The government, it was thought, had always in its hands the panacea for most economic ills, except those incident to plagues and other natural catastrophes entirely, or mainly beyond human control. But some conception of hygienic principles made it clear to a few that plagues could be averted or checked by a better sanitary control on the part of the government.

The reasoning concerning the effect of commerce and trade on population sometimes ran in a circle or was otherwise inconsistent, as when, for example, in the opinion of some, trade increased people and people increased trade. This was apparently true in the typical instance so frequently referred to, namely, that of the Dutch Republic; but the underlying economic forces which tended to bring about such a happy state of affairs received very inade-

quate attention, owing partly, if not wholly, to the fact that the view was always limited by the national horizon.

The first appearance of modern scientific methods in the study of population is seen in the observations of birth and death rates and in the more thorough investigations concerning the effects of immorality and luxury on the people. The fact that war and famine and like evils checked the growth of population was naturally understood by thoughtful men in all times. Thus we see that among the writers of the preceding period, Raleigh and Bacon in England and Botero and others elsewhere, this was quite forcibly stated, and in earlier times, too, some realization of the importance of these and other factors enters into the treatment of the problem. But in the later part of the seventeenth and in the first part of the eighteenth century we find for the first time a fully-expressed comprehension of all the main physical factors which must be considered. The psychological forces were then, as now, not fully understood. We do find all the essential elements of the later so-called Malthusian doctrine discussed, although the questionable ratio of increase of subsistence to increase of population, advanced by the English cleric, finds no strict parallel in these earlier writings.

CHAPTER VI

THE CAMERALISTIC AND OTHER GERMAN LITERATURE ON POPULATION FROM PUFENDORF TO SUESSMILCH

§ 1. *The General Position.* The German writers of this period were either statesmen or scholars; in some cases the two were combined in one person. They were, as a rule, privy and state councillors, or university professors of medicine or of jurisprudence and *cameralia*. One group, best represented by Pufendorf, was composed of learned men, writing in the usual academic Latin, theoretical rather than practical in the aim and content of their work. Their significance, however, was great; their influence went out from the universities and all over Germanic Europe and beyond. The more practical group of writers, whose leading representative was perhaps the Austrian Becher, clearly reflects the national spirit in all its writings, and, as in other countries at this time generally, this spirit ran along the paths of mercantilism. The philosophers Leibnitz and Wolff are also of no small importance in this connection, for, though sharing the prevalent ideas in regard to population, they both made contributions to the subject. Lau's is as good a systematic treatise on German mercantilist tendencies as can be found, while Suessmilch is one of the very greatest writers on population in the history of the study.

In general, it may be said that these German writings

form a more systematic group of discussions on our theme than those of any other country, possibly excepting England. But, though English writers did include Graunt and Petty and Davenant, it would not be fair to say that their work was of so painstaking a character and displayed as analytical an insight into the matter as did the writings of Conring and Pufendorf, Becher and Lau, and Suessmilch. Taken together these constitute a fine group typifying German characteristics in scholarship, not the least important of which is thoroughness. On the whole, it would seem that they contributed at least as much as the investigators, scholars and publicists of any other country in this period.

It is true that a fairly scientific and complete comprehension of the population question was developed by the English writers, and to a lesser extent by the French, and it would be difficult to determine where the first modern conceptions took root. The growth of opinion in one country seems as a usual thing to be paralleled in others, while in certain short periods its literary expression is more complete and better in one place than in others. Petty's work in statistics was a precursor of many others in the following century, as was Conring's; but with all its limitations, depending to a certain extent only on a pious theological point of view, we must say that Suessmilch's work is the most thorough and the most valuable undertaken up to this time. There were incongruities of argument among the Germans, as among the English and French, and at times it may be admitted that their enthusiasm led them to greater extremes. Their approval of a *Volksvermehrung* policy is more defensible, because of the devastations caused by the Thirty Years' War, and it was naturally believed that increasing populousness would

tend to aid the country in bringing about increased strength and prestige.¹

§ 2. *German Scholars.* Toward the close of the seventeenth century the famous work of Samuel Freiherr von Pufendorf (1623-1694), *De Jure Naturae et Gentium*, brought into prominence the conceptions embodied in the caption "natural law."² A certain spirit of freedom is apparent in this work, which, however, is at times obscure owing to the formal legal method of presentation. The same tendency is seen in more concise form in the work whose English title is *The Whole Duty of Man According to the Law of Nature*.³

In the last-named work,⁴ in a chapter on the duties of

¹ Cf. Wagner, *op. cit.*, pp. 451-452: "Die vorherrschende, wenn auch nicht ausnahmslose, Ansicht ist schon im 17. Jahrhundert, besonders in dessen 2. Hälfte, namentlich in Deutschland, und wird im 18. Jahrhundert immer mehr eine der Volksvermehrung, grossen Volkszahl und Dichtigkeit günstige; im ganzen, zumal in Deutschland, in Uebereinstimmung mit dem Bedürfniss, den Anschauungen und der Verwaltungspolitik der Praxis, namentlich im Zeitalter des aufgeklärten Absolutismus. Die eng zusammenhängende Bevölkerungs- und Wirthschafts- und Culturpolitik in der 2. Hälfte des 17. und im 18. Jahrhundert war ein notwendiges Ergebniss der gegebenen Verhältnisse nach den furchtbaren Zerrütungen des 30 jährigen und anderer Kriege. In dem wirthschaftlichen Musterlande der Zeit, in den Niederlanden, sah man auch die wirthschaftliche Vortheile grosser und dichter Bevölkerung, wobei freilich, wie im Betreff der gesammten wirthschaftlichen Entwicklung, der richtige Einblick in den Causalzusammenhang zwischen Bevölkerung und Volkswirtschaft nicht immer bestand. Die Gefahren zu grosser Volkszahl, zu rascher Zunahme, wurden zeitweise von einzelnen Theoretikern wie Praktikern nicht verkannt."

² The first edition appeared in 1672; the second in 1684. Pufendorf was for a time professor in Heidelberg, and later at the Swedish university of Lund.

³ "By that famous civilian Samuel Pufendorf, now made English by Andrew Tooke," *etc.* London, 1735.

⁴ Bk. ii, chap. ii.

the marriage state, Pufendorf says that it is certain that that "ardent propensity" for each other found to be in both sexes was not implanted in them by the all-wise Creator merely that man might obtain the satisfaction of a vain pleasure, "but that hereby married persons might take greater delight in each other's company, and that both might with the more cheerfulness apply themselves to the necessary business of propagation." The obligation under which men lie to contract matrimony may be considered with respect either to mankind in general or to their particular stations and relation in the world. From the point of view of the welfare of mankind, the propagation of mankind neither can nor ought to be kept up by promiscuous and uncertain relations, but is to be limited by the laws of wedlock. Men, considered as individuals, are under the moral obligation to enter the matrimonial state when a convenient occasion offers itself; "whereto not only a mature age and an ability for generation work is necessary, . . . but there ought beside to be a capacity of maintaining a wife and the posterity he shall bring forth, and that the man may be such a one as is fit to become the master of a family."¹ Pufendorf continues by saying that there may be exceptions to this rule, which justify celibacy; as, for example, in the case of the man who "betakes himself to a chaste single life, finding his constitution accommodated thereto, and that is capable in that, rather than in the married state, to be useful to mankind or the commonwealth; especially, also, if the case be so that there is no fear of want of people." There should not be much freedom in divorce, lest this "give encouragement to either party to cherish a stubborn temper; but rather that the irremediable state of each might persuade both to

¹ P. 197.

accommodate their humors to one another and stir them up to mutual forbearance." In all of these views except the last we note a sharp contrast with the position held by Luther.

In the first work mentioned, Pufendorf expresses himself in about the same manner. All sorts of vice should be held in check, for they are in every way a detriment to the race. Though he deprecated the evils traceable to clerical and other forms of celibacy, he did not condemn it without reservation, as we see in the quotation above; with but few exceptions a man is of greater use to the race and the state if he uses his procreative powers properly.¹ Governmental regulation and encouragement of marriage should always take into consideration the general principles already expressed. A system of rewards he regarded as preferable to one providing positive penalties.²

¹ *De Jure Naturae, etc.*, lib. vi, chap. i, § 7: "Non reprehendum illorum caelibatum qui probabiliter praevident, sese in caelibate vita ad quam per continentiam exigendam habiles sese deprehendunt, plus humano generi aut civitati suae utilitates posse praestare, quam uxoratos."

² *Ibid.*: "Matrimonia autem contrahendi occasio non ex sola aetate aut generandi aptitudine intelligitur sed ut copia quoque; sit decentis conditionis, nec non facultas alendi uxorem et prolem nacturam; ac ut mas quoque; sit idoneus ad gerendum partes patris familias. . . . Igitur est non modo non est necessarium, sed stultum insuper, juvenes animum ad uxores adplicare, qui sibi suisque nil nisi strenuam esuritionem possunt polliceri, ac civitatem mendicabulis sint impleturi, aut qui ipsi supra pueros parum sapiant." § 8: "Et hisce judicandum est, quidam potestates legibus civilibus competat circa adstringendam aut tollendam matrimonii contrahendi necessitudinem. Igitur extra controversiam est, posse legislatorem civilem ad ineundum matrimonium pro imperio adigere per aetatem et constitutionem corporis habiles, et quibus facultas se uxoremque et prolem alendi. Nam cogere aliquem, ut liberos procreet in spem esuriendi inhumanum; inopi autem vulgo civitates implere inconsultum est. Esti nollius videatur praemiis, aut subtractione commodorum quorundam, quam poenis positivis heic uti."

Pufendorf opposed restrictions to emigration, and in this he departed from ordinarily accepted doctrines. This was in accord with his general theory of natural rights. He believed in full freedom of movement, and in this connection praised the old Roman view that each should be free to come and go at will, mentioned by Cicero in his oration for Balbus. Pufendorf contended that people should be permitted to leave the country whenever they chose, and especially if the country appeared to suffer from overpopulation. There might, however, be circumstances, as in times of war, when restrictions of movement would be necessary for the general welfare, and hence proper and in accord with natural general interests.

Regarded as a whole, Pufendorf's theories are reasonable. He favored populousness, as far as it was consistent with the country's welfare. He advised prudence on the part of the married or those contemplating marriage. He would check the increase of vice and other conditions of living which must prove harmful.

The famous Strassburg professor, Johann Heinrich Boecler (1611-1672), treated questions bearing on population in a work based largely on Aristotelian ideas, entitled *Institutiones Politicæ*.¹ The numbers of people, he said, are influenced by four factors: (1) fortune or accident; (2) natural fecundity; (3) laws which encourage propagation, such as those determining the marriage age and punishing adultery and other forms of immorality; (4) immigration. Immigration should be encouraged by all legitimate means, but not by kidnapping men as was the

¹ First edition, Strassburg, 1674; third edition, 1704. Boecler was for several years also a professor of history at the Upsala University in Sweden. While he was professor at Strassburg, Seckendorff was one of his students.

custom of the Turks. The best way to increase population was to make living comfortable for the masses. This could be done by various governmental regulations, among the more important of which were encouraging trade, reasonable governmental expenses, numerous educational and philanthropic institutions, prosperous courts and benevolent government.

All classes, Boecler held, should subordinate themselves to the national welfare and raise no objections to good general rules of conduct; but great care should be taken not to favor one class or increase its well-being disproportionately or at the cost of others. He admitted the possibility of over-population, and advised careful observation of the movements of population. In the event of any really painful pressure on the means of subsistence he recommended the usual recourse of emigration to colonies.¹

Hermann Conring (1606-1681) was for some time a professor of medicine at the University of Helmstedt and had been the *Leibarzt* of Queen Christine of Sweden. When he died he was a royal privy councillor of the Danish king. His work, bearing the title, *Examen Rerum Publicarum Totius Orbis*, is the most extensive and well-rounded work on political conditions by any German writer of the time. He is known not only as a publicist, but is often spoken of as the founder of modern statistical study.

His work, which was first published in 1677, is systematic and critical, but cannot be said to be quite reliable in its details.² He lays special stress on the desirability of

¹ Lib. i, chap. vi: "Ne multitudo exuberet supra vires regionis aut si omnino exuberet, quemadmodum demigrationibus coloniisque ad modum reducatur."

² Found in Johann Wilhelm Goebel's edition, published in Brunswick, 1730, vols. iii and iv. Cf. Wappäus, *Allgemeine Bevölkerungsstatistik* (Leipzig, 1861), Part ii, pp. 548 *et seq.*

large populations on account of their military value, thus manifesting his nationalistic point of view. Wealth and extensive dominions and large numbers of people are effective checks to foreign insolence and invasion. A large population means not only great strength in war, but a full treasury in time of peace. Conring was careful, however, to point out that there were limitations upon beneficent increase of population. Large cities, such as Rome, Corinth and Carthage, had proved the disadvantages of enormous populaces; they had been characterized by vice, licentiousness and seditions.

His main discussion of the subject is found in a chapter on Spain. All writers, he says, agree that Spain had decreased in population. The causes of this decrease in population, and consequently in general prosperity, are given as the following:

1. The Spaniards are less fruitful naturally than the peoples of northern Europe. This superior fruitfulness of the latter peoples accounts for their reputed early migrations.¹

2. The inland districts of Spain had suffered from a lack of the necessities of life; in Conring's opinion these interior parts of the country were not suited for the support of great multitudes.

3. The Spaniards were guilty of too loose sexual relations and much immorality,² which always harms a population.

4. Spain had sent out an excessively large number of

¹ Cf. Malthus, *op. cit.*, chap. vi.

² "Ruunt adhuc pueri propemodum in venerem et excussis immatris viribus deinde quoque ad amplificandam sobolem sunt inepti. Nec uxoribus juncti a pellicibus et concubinis, quas magnis alunt sumptibus, abstinere. . . . Scortationes immane quantum foedant Hispaniam et ea ibi olim fuit, et adhuc hodie et lupanarium multitudo,

men to her colonies. His statement that more Spaniards were living in America than in the mother country is, of course, an exaggeration.¹

5. The frequent wars and naval disasters with which the Spaniards had been afflicted were another cause of depopulation.

6. The Inquisition and the many trials and severe punishments for heresy had driven people from the country. It is here that Conring recommends the general introduction of religious liberty.²

Conring criticized the Spanish edict of 1623,³ especially its first provision, which granted all who married between the ages of seventeen and twenty-five exemptions from all direct public burdens, particularly from taxation. Such a policy would not be at all effective in relieving misery; it would, on the contrary, have rather the opposite effect, for the inducements offered might lead poor people to marry, who would receive aid when they least needed it. Unless a man became a father of a family of at least six male children, according to the second provision, he would derive no practical good from his marriage, and would, moreover, suffer for his original indiscretion, as would his whole family. Both provisions were harmful in their ac-

qualis non reperitur in tota Europa. Ubi impune licet scortari, ibi plerumque est hominum paucitas; ubi autem multa sunt lupanaria ibi est hominum multitudo." In cap. *de Republica Hispania, op cit.*, pp. 69-72. Cf. Roscher, *Geschichte u. s. w.*, p. 258.

¹ But cf. *ante*, pp. 106, 170.

² Says Oskar Jolles, *op. cit.*, p. 206: "Conring ist ein grosser Verteidiger der Glaubensfreiheit und seine schönen Worten: nulli homini competit auctoritas viam et modum perveniendi ad aeternam salutem praescribendi, kennzeichnen ihn in dieser Hinsicht als einen nicht unwürdigen Zeitgenossen des grossen Kurfürsten."

³ *Ante*, pp. 125, 133.

tual operation, though under a better and revised scheme the second might do some good. He approved of the provisions for dowries for poor girls.

Emigration, Conring held, in opposition to the movement represented by Pufendorf, should, as a general rule, be prohibited and immigration as strongly encouraged. Those who immigrate should be aided in their first endeavors to take up agricultural and industrial pursuits.

Conring was emphatically opposed to the toleration of vice, which he regarded as a corollary of celibacy. He advised the prohibiting of the further establishment of cloisters, the occupants of which he regarded as thoroughly useless.¹ In these matters Conring agrees entirely with Luther. If all the monks in Spain, he said, were to marry and make proper use of their procreative faculty, they could easily add one hundred thousand people to the population in one year's time, which would be of no mean significance for a country in Spain's condition.² To increase the fecundity of Spanish women he, like Campanella,³ advised them to contract marriages with men from the countries of northern Europe.⁴ In general, the relations of the sexes should be most carefully regulated and guarded, lest vicious conditions and consequent disastrous habits of life weaken the nation's people and check its increase.

§ 3. *The Nationalists and Mercantilists.* Ludwig von Seckendorff (1626-1692) was for a time chancellor of the Halle-Wittenberg University and privy state councillor.

¹ "Quae nulli vel ecclesiae vel reipublicae usui."

² Cf. *De Maritimis Commerciis*, chap. 136 (Goebel, vol. iv, p. 919).

³ See *ante*, p. 108, note.

⁴ "Si connubiae Hispaniae mulieres contraherant cum viris ex septentrionalibus populis."

His first important work, *Teutscher Furstenstaat*, appeared in 1655, while the author was still a young man, and is a good exemplification of the strong national spirit generally characteristic of the writings of German scholars after the Peace of Westphalia. Seckendorff's work breaks away from the prevalent cameralistic scholarship, in that it is not so largely based on historical data and references, and is written in the language of the people.¹ Seckendorff wished to separate his work from the learned theoretical writings of many of his contemporaries and make its influence felt in wider circles. Still he had great respect for the valuable works intended exclusively for the use of scholars.

A later and more mature product of his mind was the *Christenstaat*, published in 1685. In this work especially he considered the significance of population. A Christian as well as national feeling is seen in all its pages.

From Christianity and Christian charity flows that solicitude of God-fearing governors for their subjects, that they may get all possible encouragement and profit in obtaining their subsistence and performing their business, and that their numbers may increase rather than diminish, for the nation's greatest treasure consists in a well-nourished population. Such a population not only ensures peaceful relations with foreign countries, but is itself the gauge of governmental power in the amount of taxes, fees and contributions of all kinds which it returns to the national treasury.²

¹ See preface to fifth edition (Frankfurt a. M., 1678): "Er habe die Zuversicht, dass hiermit mehr Personen und sonderlich denen, welche sich nicht eben unter die Gelehrten rechnen, gedienen seyn wurde; . . . die Gelehrten aber vor sich selbst das meiste weiters bedenken und nachsuchen können, wiewol die Materia also beschaffen, dass man sie mehr aus Erfahrung als aus den Büchern suchen müssen."

² P. 433.

Seckendorff was in favor of religious freedom and advocated giving asylums to industrious refugees, but he did not believe that such emigrations *en masse* as took place in his day were traceable to religious persecution alone; there was a strong desire for a betterment of economic conditions also. He urged the regulation and improvement of the sanitary conditions of the country by laws, which would lengthen life by lessening disease. The country's industries, and particularly the monopoly companies, should be controlled, in order that people might more easily obtain the necessities of life and thus be enabled to make more comfortable provision for their families.¹ All these measures would add to the total number of people, and therefore to the nation's power.

Like others, he saw a limit to the possible increase, and remarked that young men would find it advisable to go into foreign military service or to emigrate to countries where economic conditions were better when the number became too large. When a country reached this point numerous children could not be regarded as a blessing in the majority of cases, for they would necessarily suffer from insufficient food. His position regarding the establishment and management of foundling homes is in the nature of a compromise. Some thought that such institutions should be erected in order to prevent the loss of life among illegitimate infants by infanticide and otherwise, while others declared that such homes were simply adjuncts to vice and a means of relieving it of its natural consequences, a view often repeated in much later times. Seckendorff advised the establishment of such homes for the sake of the great number of unfortunate children whose parents were very poor or prevented from supporting their

¹ Pp. 238-239.

offspring by various misfortunes. This would save many lives, while vice would not be made more comfortable.

Seckendorff's position, in brief, favors great populousness, but only up to the limit set by the possibility of obtaining comfortable maintenance for all. He advised prudence in all matters relating to matrimony and opposed all toleration of vice, which he regarded as deleterious in every respect.

An interesting work, entitled *Geldmangel in Teutschland und dessen gründliche Ursachen*, was published in Bayreuth in 1664. The author's name, according to the title-page, was Gottlieb Warmund. This is, however, evidently a pseudonym.¹ The author held that the scarcity of money in Germany was due to the long wars, which had ceased only a few years before, and which had been the immediate cause of an alarming diminution of inhabitants and devastation of villages and cities. He points out the economic, fiscal and military advantages incident to great populousness. "It is clearly evident," he says, "and experience has proved, that the more populous a country and a city is, the greater the trade and traffic which must be attracted thither, and by means of this both money and riches are gained and remain in the country." Under the circumstances it is not surprising that he could hardly admit the possibility of over-population. Certain heavy excises or contributions might have undesirable effects.² War and other abnormalities would, of course, bring about irregularities,

¹ Cf. Jolles, *op. cit.*, p. 220.

² The following excerpt is of interest and value as indicating the conditions on which this writer's theories were formed: "Das Vornehmste aber als unsere andere Ursache ist die grosse augenscheinliche Verminderung der Einwohner in Teutschlande, welche der lange Krieg verursacht. Denn man hätte der in den Schlachten und blutigen Treffen gebliebenen vergessen können. Es würden aber vieler Oerter

which were deplorable in their effects; but in time of peace, with industry properly encouraged, people could increase indefinitely; the greater the increase, the better for all concerned.

Three great Austrian writers of the latter part of the seventeenth century form a sub-group: Becher, Schroeder and Hornekg. They are all ardent mercantilists and protectionists and supporters of Austrian national ambitions.¹

Johann Joachim Becher (1625²-1685) was for some time the *Leibmedikus* of a German prince and a *professor institutionum medicinae* at Mayence. His two greatest political works are a *Politische Discurs an den eigentlichen Ursachen des Auff- und Abnehmens der Stadt, Laender und Republicken, in Specie; wie ein Land Volckreich und Nahrhafft zu machen, etc.*, first published in 1668; and *Psychosophia oder Seelen-Weisheit*, first published in 1678.³ Of these two works the last named gives the more complete discussion of the subject. Although much of the discussion of the earlier work is copied almost *verbatim* in the later, substantial additions are made in the *Psychosophia*.

die Länder, Städte, Schlösser und Dörfer ganz verwüstet, niedergerissen und eingeäschert, die Einwohner nieder gemetzelt, die davon kamen mussten verlaufen, und starben hernach meistens von Hunger, Grämnis, auch an bösen Krankheiten. . . . Ihrer Viele hatten wegen der grossen Bedrängniss einen Abscheu vor dem Ehestande und wolten sich in die Beschwerlichkeit des Hauswesens nicht steken." *Geldmangel, etc.*, pp. 67-68.

¹ Cf. *Handwörterbuch* (Elster), art. "Schroeder": "Er [with Becher and Hornekg] bildet das Dreigestirn von Männern welche als entschiedene Anhänger des Merkantilsystems, hauptsächlich im 17. Jahrhundert in Deutschland, besonders aber in Oesterreich," etc.

² Also given as 1635-1682.

³ The editions used by the present writer have been: *Discurs*, Frankfurt a. M., Zweyte edition, 1673; *Psychosophia*, Hamburg, Vierter edition, 1725.

Becher best introduces his discussion in the *Discurs*. Man is the material of which the state consists; he is not only a political animal, but an *animal sociabile* who seeks society, as is also stated in the Scriptures, "It is not good for man to be alone." This fact makes other men necessary, and in order that they may be born God created the female sex and instituted marriage, the end of which is to "be fruitful and replenish the earth." Everything, therefore, which weakens human society should be done away with or punished. If then, says the author, he were to define a city or state he would say that it was a populous society provided with nourishment.¹ One person is as unable to make a society as a single swallow to make a summer, and three or four menials do not make a village or city. The more populous a city, the more powerful it is; and it follows that the most important maxim of a state must be to make its people many and comfortably nourished.²

This maxim accepted, it is important to consider by what means populousness may be brought about. Population depends on the food supply, and it follows that the necessities of life should be made as accessible as possible to peasants, laborers and small dealers. It is necessary to protect the labor of the country from foreign competition

¹ "Eine volkreiche nahrhafte Gemein." P. 1.

² "Die vornehmste Staats-Regul, oder *maxima*, einer Stadt oder Lands seyn soll, volkreiche Nahrung; denn damit eine Versammlung bestehen könne, muss sie zu leben haben, ja eben das letztere ist ein Anfang dess erstern: die Nahrung sag ich ist ein Angel, oder Hamen, wodurch man die Leut herzulocket, dann wann sie wissen, wo sie zu leben haben, da lauffen sie hin, und je mehr hin lauffen, je mehr können von einander leben; und das ist der andere fundamental Staats-Regul, nemlich um ein Land populos zu machen, dem selbe gute Verdienst und Nahrung zu verschaffen." P. 2.

The first edition of this book is a very interesting one. The author is a student of the law, and the book is written in a very simple and clear manner. It is a very good book for students of the law, and it is a very good book for the general reader.

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to support a family has first been made. "Marriages which occur between persons very different in age are usually for ulterior motives, especially for money, and as a rule no children can be expected; they should be prohibited by law." The husband should be as nearly ten years older than the wife as possible.

Foundling asylums are necessary in every reasonably well-ordered state, says Becher. In this he differs radically from both Seckendorff and other writers. Such homes should be erected and intended for the reception of illegitimate children with the avowed purpose of lessening the temptation under which fallen women struggle to commit either abortion or infanticide. Prostitution he believed to be a necessary evil,¹ and the establishment of foundling homes he regarded as a necessary result of this condition.

Monogamy, in Becher's opinion, is the only practicable form of sexual union under European conditions. His argument here is dependent on his ideas favoring great populousness, but always with the careful reservation that increase be limited to the comfortably-situated *bourgeoisie* and be not of the poorest proletarian character. Population must not be increased at the expense of added misery. Monogamy is not only the form prescribed by the Scriptures, but it rests, moreover, upon sound natural and political bases. European peoples are very fruitful; many an ordinary man has as many as twelve children. "What would happen," asks Becher then, "if such a man had many wives instead of one?" There are in most places a sufficiently large number of people; a larger multitude

¹ "Welches alles verhütet werden kan wan da frey stehet unehe-liche Beyschlaferinnen zu halten seine Lust mit ihnen zu büssen: gibts dann Kinder, so werden solche in den Findel-Häusern aufgezogen." *Psychosophia*, p. 254.

would lead to wars, in which the excess would perish. In Asia conditions are not so; neither men nor women are so fruitful; so that even when a man has several wives it is not often he has as many children as a German peasant with one wife. The weak point in Becher's argument that polygamy would increase population unduly is the fact that he forgets that if one man had many wives, where the sexes were approximately even in number, this would necessitate many men remaining single.

Becher discussed briefly what Malthus termed moral restraint or the preventive check—prudence.¹ While he deplored the too frequent hard times, which have this as one result and emigration as another, he regarded it as inevitable in the case of man, who is a rational animal; in the case of animals this prudence would not be apparent, but an instinctive tendency to migrate to more favored localities would also exist in them.

It is true that Becher was in favor of populousness, but, as we have seen, within reasonable, that is natural, limits. His general position is sometimes clouded or shortsighted, as when he opposes the introduction of inventions which reduce the labor necessary for a certain piece of production.² This was a fallacy, however, of which writers since

¹ "Es gibt . . . Teutschen welche . . . weder kecklich heyrathen noch geheyrathet, aus Mangel der Mittel und Furcht das Gezeugte zu ernehren, öftters ihrer ehelichen Pflicht sich enthalten; . . . und das sich schwer in Teutschland zu ernehren, daher nicht allein keine fremde Nationen dahin kommen, die sich darinnen niederlassen, sondern auch aus Mangel der Mittel der Nahrung lauffen unsere Hochteutsche selbst hinaus in andere Laender." *Discurs*, p. 1187. Cf. Jolles, *op. cit.*, p. 217.

² "Alles dasjenige, ja sogar auch diejenige künstliche inventiones verbieten, durch welche man in der Arbeit die Menschen erspahrt, als da sind die Band- und Strumpffmühlen, auch andere dergleichen instrumenta." *Discurs*, p. 309.

his time have been guilty, and the plausibility of the argument, especially the fact that the economic friction and consequent immediate suffering incidental to this phase of dynamics, renders it effective among labor unionists to-day. Another rather peculiar statement which, were it not for the weight of his general argument, which is based on nourishment (*volckreiche Nahrung*), would tend to make him seem an extremist, is that the reason for beheading a murderer is the fact that he has limited the population by his deed, and the reason for treating a thief similarly is that he deprives others of their portion of goods.¹

Wilhelm Freiherr von Schroeder (died 1689) is perhaps the best type of the Austrian protectionist school in this period. His main work bears the title *Fürstliche Schatz- und Rentkammer, etc.*, and was first published about 1675.² He wished to encourage manufactures and home industry generally. The greater the development of domestic industry, the greater the population could become. For this reason all importation of luxuries in dress and the like should be checked by high import duties; dress goods and fineries from Paris, which the ladies so inconsiderately insisted upon having, should be prohibited. In the development of home manufactures two matters were of greatest importance: the abolition or restriction of monopolies, which checked population by placing artificially high prices on the necessities of life, and the employment of foreign labor and bachelors. The last was a most baneful custom, for bachelors and immigrants were wanderers and contributed little to national strength, giving little to the state

¹ "Warum schlägt man einem Morder den kopf herab, und hencket einen Dieb? Allein darum, dass der erste die Populosität, der andere die Nahrung der Gemeinde mindert." *Discurs*, p. 106.

² The edition used is the one which was published in Leipzig, 1713.

treasury and preventing married men from working for the support of their families.¹

Becher had a faithful supporter and a follower in his nephew, Philipp Wilhelm von Hornekg (1638?-1712?), whose principal work, *Oesterreich über Alles wann es nur will* (first published in Nuremberg in 1684),² is one of the clearest and most concise expressions of German mercantilism. His views are, as a whole, like those of Seckendorff and Becher, or rather they are the result of a combination of these two writers. He was an ardent patriot, and his wish that Austria be "above all" is the foundation of his argument. He lacks that cosmopolitanism which we discern in Pufendorf and, to a lesser extent, in Becher.

Hornekg desired the greatest possible attention paid to the cultivation of land, and said that many states—and this was most true of Austria—could support two or three times as many people as they then had. He attributed the comparative scarcity of people to various circumstances, the most importance of which were "wars and reformatiōns,"³ which is, of course, simply an allusion to devastations due to the Thirty Years' War. Manufactures increase the number of occupations, which enable young men to make money and to marry earlier than a simple reliance on agriculture

¹ "Wo restringirte Manufacturen sind, da kann man unmöglich die Theurung verhindern und restringirte Manufacturen machen den *numerus* der Einwohner weniger." (P. 346.) "Dieweil diese Gesellen meistens unverheyraethe Leute seyn müssen . . . wird die *Multiplication* der Menschen im Lande, welche doch *validissima monumenta regni* sind, gehindert." P. 347.

² Edition used, Regensburg, 1712.

³ "Krieg und Reformation seynd die beyde Grundursachen gegenwärtigen Uebelstands . . . und gleichwol ist vieler Orten der Elende Anblick noch so frisch, ob wäre der Feind erst gestern oder vorgestern abgezogen." Pp. 72 *et seq.*

would permit. But both agriculture and industries were to be watched and regulated as the best interests of the people demand. His objection to monopolies, like that of his contemporaries, was based largely on their abuse of power, which made the condition of the masses more arduous, and hence by checking marriage hindered increase. The same objection, he says, might be urged against those crafts which had too many restrictive regulations.

§ 4. *Leibnitz and Wolff.* Gottfried Wilhelm von Leibnitz (1646-1716) was not only one of the greatest German philosophers, but was a political economist as well, and as a statistician he forms the link which connects Conring with Suessmilch. He was one of the first to lay stress on statistical investigation, and his analyses of statistical material are suggestive and form the basis of many later developments along these lines.¹ He acknowledged indebtedness to Petty, but developed independently a plan of investigation.² He speaks of a "*topographia politica* oder Beschreibung des gegenwärtigen Zustandes des Landes." This should be carried out in order that information concerning the relative amount of material goods and food supplies as compared with the number of people might be known, and state action taken accordingly. Population could thus be understood and increase encouraged more intelligently.

Like all his contemporaries, he would have the state en-

¹ Jolles, *op. cit.*, p. 223, remarks: "Bemerken wollen wir, dass sich schon manche von uns für völlig modern gehaltene wirthschaftliche Probleme bei Leibnitz berührt und besprochen finden. Wir nennen hier nur seinen Vorschlag von Arbeitsämtern, sowie seinen Entwurf einer staatlichen Unfallversicherung."

² See *Essai de quelques Raisonemens nouveaux sur la Vie humaine et sur le Nombre des Hommes*, in *Works* (Klopp), first series, vol. v, pp. 326-337; also p. 18.

courage marriage when conditions warranted it, for the

true power of a kingdom consists in the number of men. Where there are men, there is substance and strength. Where men are most diligent and laborious and saving of their goods, there all are safest; and manufacturing especially is to be considered the most useful occupation in accomplishing this result.¹

Leibnitz rejected the current ideas of the imagined bad effects of inventions. They add to the nation's productive capacity. They save time and effort and augment the power available. This must necessarily cause an increase in population by expanding the limits of subsistence. His discussion is incomplete but suggestive, as well as exceptional for his time.²

The government should take all things into account in making laws intended to further the general welfare. All possible means of encouraging and increasing the productivity of agriculture, as well as of manufactures, should be studied. The country had suffered much in both branches of industry during the long wars, and it was necessary for Germany even more than for other countries to pay attention to the details of its industrial life. By such means and by the frugal and busy habits of the people would the

¹ Guhrauer's edition, vol. ii, p. 312.

² *Discussion d'une Question utile et curieuse*, in *Works*, vol. iv, pp. 391 et seq.: "Je croy qu'il y en aura qui s'étonneraient d'abord, qu'on peut mettre en question: s'il faut se servir des avantages qu'on a en mains, mais ces avantages peuvent estre compensés. D'autres dés-avantages, de sorte qu'il faut peser pour voir de quel costé penche la balance. . . . Les avantages qu'on retire de ces machines sont à l'égard du pays dont il s'agit en particulier. L'avantage du genre humain en général est l'augmentation de son pouvoir. Or le pouvoir de quelcun est augmenté, quand il peut faire plus d'affect, avec moins de peine, moins de frais, moins de personnes et moins de temps."

strength of the nation, as indicated by the numbers of citizens and their wealth and the funds available in the state treasury, again become great. This was Leibnitz's ambition and desire. He endeavored to turn his patriotism into channels which would do his king and people the most good.¹

Like Suessmilch later and Becher among his predecessors, he came to the conclusion that polygamy could not be approved on the ground that it would increase population. It could not remedy the scarcity of people existing, for, as elsewhere in Europe, the number of women was about the same as the number of men.² Nature then dictated a monogamous form of marriage, which, if well regulated, could not fail to be most favorable to increase.

The opinions on population from the end of the Thirty Years' War to the beginning of the eighteenth century were unanimously favorable to the greatest possible increase. To attain this end it was ordinarily considered best to encourage marriage and to better economic conditions, that fecundity might be possible and permanent in its results. For the same reason sanitary regulations and improvements were advocated. Commerce, manufactures and agriculture should be developed and, when necessary, protected against foreign competition. These were the main methods of increasing the number of people. If these matters were not attended to, the limitations to population, apparent in the lack of work and food, would result in national weakness. Immigration should be encouraged when the native laborers themselves were in comfortable circumstances; otherwise their addition would increase the

¹ Cf. Pfeiderer, *Leibnitz als Patriot*, *passim*.

² *Works* (Klopp), vol. i, p. 337.

prevailing poverty and discontent. Leibnitz was the last of the great scholars of the seventeenth century and the forerunner of much of the thought relating to population problems in the eighteenth.

The political philosopher Christian Wolff (1679-1754) was, like Seckendorff before him, for some time a chancellor of the university at Halle. His *Vernünfftige Gedanken von dem gesellschaftlichen Leben der Menschen* was published in 1721.¹ He favors the *Bevölkerungspolitik* of those times, but with reservations; the inhabitants should be "neither too many nor too few."

For the general welfare, the state should have a care that the number of people does not exceed the limits which the total product of the state, with possible importations, sets. People must have nourishment, clothing and shelter; the state must see to it that the citizens are provided with these necessities. If this is not done begging will result; this should be both limited and prevented by laws.²

Prosperity is the matter of first and essential importance in every really strong nation. "Where everything goes well and people make good livings, there every one wishes to go; and where the opposite is true, no one demands entrance and those who are there long to get away."³ Marriage, increase and immigration stand thus in a direct relation to prosperous conditions. It is the duty of the state to see to it that there are as many subjects as the general welfare and security demand, and for this reason the emigration of persons should not be permitted when the state will suffer in these respects. This, he says, is in agreement with the general principle that community life is a human necessity; man is a political and social animal;

¹ At Halle.

² § 279.

³ § 275.

no one should, therefore, be permitted to leave a community if those remaining would suffer thereby.

The number of people is obviously increased either by procreation or the settling of people from other countries; in the long run, the population is also made larger by a lengthening of the average life. It is, therefore, clear that good sanitary regulations as well as prosperity are necessary. Contagious diseases must be prevented, and all known methods of furthering the common health must likewise be employed.¹ Where an increase in population is specially desirable, economic conditions should be made so favorable that a man could marry at an early age and be in a position to support a wife and children. It is not sufficient that women be fruitful in marriage; the children that are born must be insured life and health and the needed training. Marriage in its monogamous form is the best for propagation and for the maintenance of virtuous living. Adultery and all vice should be prevented by all means possible, and polygamy in any form is not to be thought of.

Wolff's theory of population is, then, based on general welfare; his desire for great numbers depends on his view that wealth and national strength are concomitants of density of population. Power, he says, consists in money, in the army which a state is able to keep, and in the greatest amount of employment; but above all in a rich and populous state; in such a state there is always more money, and a larger army is possible than where money and people are wanting. But, he adds, with some confusion of thought,

It is easy to see which is preferable,—money or people. Wealth is superior to number of subjects; for where there is enough money an army can always be maintained and when

¹ § 275 *et passim*.

necessary foreign mercenaries can be hired to defend the country. If there is no money with which to support an army, a multitude of people is of small service.

His argument here is clearly a pure piece of academic speculation, and is based on the narrow assumption that the political ambitions of the king are of greater importance than popular well-being. The argument is based on the presumption that the people are naturally unfaithful to the king and must be bought. Wolff failed to realize that a healthy but poor people could in his day, as in earlier times, combine, and when there was a real bond of sympathy, do more than wealthy governmental organizations with unsympathetic citizens.

Wolff's discussion in its entirety is of about average insight. His theory that increase depends on marriage, fecundity, longevity and immigration, which are possible only in good times, is one whose basis is sound.

§ 5. *Lau and Suessmilch.* One of the best examples of the *Volksvermehrung* spirit of eighteenth century Germany is found in the sharp analysis of Theodor Ludwig Lau, in his *Aufrichtiger Vorschlag von glücklicher, vortheilhafter, beständiger Einrichtung der Intraden und Einkünffte der Souverainen und ihrer Unterthanen*, first published in 1719.¹ His work is quite in keeping with the ideas of the time: "on the multitude of people depend the power and wealth of the state."² Power depends on population, because where many people live many soldiers are easily enlisted and "formidable armies" can be placed in the field. Wealth depends on the same, because where there are many people there is always much trade, and industries and

¹ Frankfurt a. M.

² Das erste Capitel, § i.

varied occupations are necessary results. These are fruitful sources of money and money value.¹

Population may grow through natural increase and by immigration.² Natural increase is made possible by timely and frequent marriages, quick changes from widowhood to matrimony, and a "copious and rich procreation of children." These are made feasible by certain rewards in money and money value for labor, privileges and immunities to parents and notable preferences to fathers as compared with bachelors. Increase is hindered by the following conditions:³ (1) the great number of unmarried; (2) severe spiritual and temporal punishments for fallen women and illegitimacy; (3) the too great license given to houses of ill-fame; (4) the lack of means with which to begin housekeeping. Increase is lessened by still other causes: (1) contagious and fatal diseases and pests; (2) persecution on account of religious conviction; (3) banishment; (4) wars and general conditions of uncertainty; (5) heavy contributions and taxes; (6) the supremacy of force over law; (7) expensive goods and want; (8) violent military compulsion; (9) foreign enlistments; (10) the enlistment, emigration and sale of regiments for the use of foreign powers; (11) great emigration of native subjects.

When statesmen are aware of the evil effects of such unfavorable circumstances, they should use their power and influence to prevent or counteract them. Commerce, manufactures and agriculture should all be carefully protected

¹ "Das Reichthum, *in regard*, dass viele Menschen vielen Handel und Wandel, Gewerbe und Handthierungen verursachen, welche gleich fruchtbaren Müttern, eine Abundantz von Geld und Geldeswerth erzeugen." § iii.

² §§ i-xi.

³ § xiii.

and encouraged. Whenever possible, wages should be made as high as the employers could afford; for with "money and money value" laborers must live; without these they are tempted to emigrate or to beg and become worthless outcasts, and are unable to take care of families. Want is always detrimental to increase and is the fountain of vice. A king should govern his country with the same solicitude with which a father rules his household.

In Lau's opinion a certain regulated form of polygamy is advisable; it is at least far better than the existing system of brothels and breaking of marriage vows. It would lead, he thinks, in contrast with Leibnitz and others, to an increase in population and would lessen the deplorable effects of vice.¹

Johann Peter Suessmilch (1707-1767) was one of Frederick the Great's military chaplains, a man of scholarly attainment but of comparatively humble position. His great work, *Die Göttliche Ordnung*, was first published in 1741, several editions appearing later.² Throughout the work his teleo-theological point of view is apparent; but this seldom does it any real harm, though it lends a relig-

¹ §§ vi-vii.

² The full title is *Die Göttliche Ordnung in den Veränderungen des menschlichen Geschlechts aus der Geburt, dem Tode und der Fortpflanzung derselben erwiesen*. The edition of 1742 seems to have been an unauthorized but unrevised reprint of the edition of 1741. The original edition contained the germ and essentials of all the later and greatly expanded editions. The second edition proper, or that of 1761-1762, and that of 1742, are the ones used in this study, though the writer has had access also to one printed after Suessmilch's death. Suessmilch was for a time a student at the Halle university while Wolff was the chancellor; this probably explains the presence of a preface to the first edition written by that philosopher. The best and most complete English study of Suessmilch is that by Dr. Frederick S. Crum, published by the American Statistical Association in 1901.

ious tone to many of his conclusions, which are based on the mortality and birth-rate tables of Graunt, Petty, Struyck, Kerseboom¹ and others, as well as on his own extended investigations in Brandenburg. This work is the first attempt at a complete and scientific treatment of population, and there are ideas in it of as permanent value as any of those contributed by Malthus in his *Essay*. It is Suessmilch who, in spite of the insufficiency and chaotic condition of available material, was first able to present a complete view of the apparently accidental character of sex and age conditions and movements of population in general, and to show that, when they were considered in large groups over long periods, they presented very regularly recurring features.

Everything is arranged according to definite numbers and proportions. Men are born and men die, but always in a certain ratio. Children are born, sons and daughters promiscuously, but without violation of the order once chosen by Providence. Men die at first sight irregularly as regards age, but upon full observation in accordance with fixed proportions.²

The birth-rate is always normally greater than the death-rate, but the difference between the two varies according to circumstances. The average rate in all countries and all years covered by his observation is about thirteen births to every ten deaths. The rate in Prussia was higher than elsewhere, being sixteen or seventeen births to ten deaths,

¹ Nicholaas Struyck's *Utrekening der Kanssen, etc.*, appeared in 1716; Wilhelm Kerseboom published a *Verhandeling tot een proeve, om te weten de proöable Menigte des Volks in de Provincie van Holland en Westfriesland* in 1738, and *Preuve interessante et sensible, etc.* (Part xiv, *Nouvelle Bibliothèque*) in 1743.

² Preface, p. 21 (edition of 1742).

while in England it had been as low as eleven to ten. It is this difference which is the cause of increase. In the last analysis the only limit to this increase is that fixed by the size of the inhabitable parts of the earth; if the world were as large as Jupiter or Saturn, the births could be two or three times as frequent as the deaths, instead of being in most cases not one and one-half times as numerous.¹

The actual or possible rapidity of doubling cannot be determined without considering the special effects of wars and plagues in particular, and these are quite uncertain matters, so that all calculations must remain proximate and cannot be regarded as reliable predictions. Several writers, with whose works Suessmilch was acquainted, as Graunt and Petty, Nichols, Scheuchzer and Wiedeburg, had endeavored to determine the time required for the doubling of population. In every instances they had failed to give due consideration to the full importance of variations, in the rates of increase, between cities and rural districts. London, for example, had annually about one thousand deaths in excess of its births, and had consequently no natural increase. This suggests the importance of migrations to city populations.² Suessmilch regarded it as a safe estimate that the normal period of doubling is about one hundred years. In England, as Graunt had indicated, the increase was only sufficient to double the population in about two hundred and seventy years, while Petty's calculations varied in the proportion of 10:1200 or 1:120, with the resultant compromise for conditions in his time of a doubling every three hundred and sixty years.³

In the first edition he estimated the population of the

¹ Pp. 2-5.

² P. 11.

³ P. 12.

world as 950 millions, but "in round numbers 1,000 millions;" in the second edition he placed the figures at 1,080 millions.¹ If a fair portion of the earth's surface be regarded as habitable, he thought it probable that 4,000 millions could live on it, perhaps even 5,000 millions. If increase took place at the rates given in his estimate, population could increase for two hundred years without trouble. If it doubled in two hundred and seventy years, as in Graunt's estimate, at least five hundred years must elapse before even a proximate limit would be reached. But these limits could not be regarded as certain or definite; agricultural and mechanical improvements were possible and altogether likely, so that the limits to increase might be indefinitely extended.

Suessmilch disagreed with Struyck, who thought that though births ordinarily exceeded deaths, wars and pestilence had such a strong counteracting effect that populations remained practically stationary. Struyck's observations were based on the limited material afforded by populous French cities whose conditions could not be regarded as typical.

Like Frederick, whose faithful admirer he was, the author of the *Divine Order* desired greater populousness. His investigation makes him optimistic concerning both the desirability and the possibility of increase; fears of overpopulation he regarded as not worthy of attention. Population not only should increase, but it can and does. It should not, however, increase more rapidly than adjustments for it could comfortably be made. Improvements in the modes of production, especially in agriculture, such as the redeeming of waste and swamp lands and the irrigation of deserts, would greatly increase the food supply,

¹ P. 75. See also second edition, vol. ii, pp. 177, 222.

as in Egypt and elsewhere. With more intensive cultivation, the yield of land could be increased even a hundred-fold.¹

The fact that wars and pestilence often befell countries where there was not the least over-crowding was an evidence that they were not intended necessarily as checks to increase; these might be at times God's way of punishing people for their sins. Increase was variable, and regulated by God's wisdom and prescience. If it were necessary that increase be less rapid, two-thirds or more of the children might be caused to die, whereas the normal rate was not so great; or still less than the ordinary number might die if the population were too thin. God regulated population according to the supplies he had given.² When numbers became large the rate of increase lessened and a more intensive cultivation of land made productivity greater, so that conditions remained as favorable as before.

In the second edition, Suessmilch refers to several calculations made since the first publication of the *Göttliche Ordnung*, among which are those of Euler and Whiston, and Hume and Wallace, and he makes out a geometrical table of possible increase, but, like Petty's, his periods are of varying length, becoming greater as population increases.³ Though arbitrary in character, his calculations seem to correspond roughly with historical data and lead to more reasonable conclusions than the purely geometrical ratio of Malthus.

It is the duty of statesmen, says Suessmilch, to encourage population, because it is the means of happiness, security, power and wealth,⁴ and the happiness of the masses is in proportion to their number. It was, moreover, the Crea-

¹ P. 70.² P. 99.³ Vol. i, p. 396.⁴ *Ibid.*, § 205.

tor's intention that man should "be fruitful and replenish the earth." All unreasonable or unnecessary checks to population should be removed. Suessmilch's general attitude here is, then, one in hearty sympathy with the mercantile doctrine. This is emphasized in his discussion of increase.

There are four great and powerful natural checks to the increase of the human species, besides the general one involved in the limited space and undetermined productivity of the soil and the effects of a normal death-rate. If increase had actually resulted in the doubling of population in one hundred years "the earth would long since have attained the measure of its inhabitants" (*das Maas seiner Einwohner*). This would have led to later marriages and less fecundity, so that deaths and births would have been about equal, with the consequence that population would have remained stationary. This was not the case; countries once populous were then empty. "Where is the power and glory of Carthage, Thebes, Babylon or Nineveh?"¹ The answer is found in the frightful ravages of wars, pestilences and other violent disturbances.

(a) Pestilence causes abnormally high death-rates, as was seen in Augsburg in 1535, when the total number of deaths for the year increased from the normal number of thirteen hundred to thirteen thousand, and in Danzig in 1602, when the rate was octupled. He cited the plagues in Hamburg in 1710 and in Copenhagen in 1711, as well as many others. Pestilence often carried with it as many as half of the inhabitants, not only in cities, but in whole provinces. Whether pestilences or wars were the more destructive was to be determined according to the particular circumstances. Some wars had changed whole dis-

¹ Vol. i, p. 313.

tracts into deserts, being accompanied by all sorts of barbarities. War had often taken away more than half the inhabitants, while pestilence had swept away from one-twelfth to one-half of the people. Plagues, like wars, affect adults, and separate husbands and wives, but they also cause children to perish, and they are the cause of deficiency in the growing labor force of the country. People in the marriageable age are lessened, which often necessitates immigration.¹

(b) "War is a real monster, a disgraceful blot on reason and humanity, and especially on Christianity." War robs the state of many of its best citizens, generally those in the prime of life, from whom a numerous and strong progeny might have been expected. But it is not battle alone which robs life; the indirect evils incident to camp life kill many people. Not only soldiers, but their attendants also, must suffer. Marriages are broken and many women are forced into a permanent widowhood. Through the divine provision the sexes are equal, or approximately so in the marriageable period of life; wars destroy this equilibrium, and the want of men resulting prevents many women from marrying. Agriculture, trade and industry are often disastrously affected by war, and as this diminishes the means of subsistence (*Mittel zum Unterhalte*), fecundity is lessened. By the barbarity which is a part of war, and by the hunger and disease induced by it, a country may be put behind as much as fifty years. This was all evidenced by the Thirty Years' War.

(c) Starvation is one of the very worst and most effective checks to increase. When crops fail, either because of drought or too much rain, or other misfortunes, want cuts down men as a sickle does the grain. Of this there are so

¹ Vol. i, pp. 314-330.

many historical examples that no special mention need be made of them. Governments should provide store-houses and always be on guard against such calamities.

(*d*) Earthquakes and floods do great damage and destroy much life, but as compared with the preceding checks to increase they are of small importance.

Besides the above means of limiting population there were artificial methods of preventing procreation, such as polygamy; of this existing facts in Turkey and elsewhere were ample proof. Polygamy destroys the natural form of sexual union, necessitating the existence of either vice or celibacy or eunuchism, all of which are detrimental to increase "and should be abhorred."¹ What eunuchism is to the East, celibacy is to the West in the states under the control of the Roman See.

The spirit of exaggerated perfection became apparent even in the time of the Apostles. It was forgotten what man was, and what his purpose and destiny in the world were; and the intention of the Creator was lost sight of. People wished to be more than men; they would be angels.

But, as Suessmilch remarks, such ideas had been common among certain schools of philosophy and non-orthodox Christian communities. Such unreasonable notions, when carried into practice, could not fail to hinder increase and foster many evils, such as vice and illegitimacy. In France alone he estimated that there were 500,000 celibate clerics.

The unmarried state of soldiers acted also as a check to population. Soldiers were not only forced by circumstances to remain single or away from their families, but they suffered from the dissipations and the consequent misery

¹ Vol. i, pp. 362-372

that accompanies army life. Lest the effects of all this should become too painful, the state should provide for the wives and children and others dependent on soldiers for their maintenance.¹

"That state is on the way to populousness and the greatest common happiness in which all who have attained mature age can marry and where no hindrances are to be found." Of course, the greater the number of those living became, the greater became the checks to marriage, and fecundity became less, fewer being born in proportion to those that die. But a state must prevent no one from marrying, be he clergyman, soldier or civilian. The two most important elements in national life were agriculture and industry.² Agriculture is most productive when each peasant has a piece of land large enough to support himself and his family and to give the state treasury its share, besides being able to buy what necessities of life his land does not provide. He should not have too large or too small a plot, for excess can do him no good. Factories are important, but a state can do without many, if it must, when its agriculture is well cared for.

Prices of necessities should not be too high, for this would prevent many from marrying who but for prudential motives might otherwise do so. A man should always consider whether he would be able to support a family; if he were conscientious and found it impossible, he would not marry. The state should use its efforts to remedy such conditions.³

Luxury and unnecessarily high standards of living were harmful and operated against marriage and fecundity.

¹ Vol. i, p. 425.

² "Selbige sind der Pflug und der Weberstuhl." *Ibid.*, p. 426.

³ *Ibid.*, p. 439.

Contrary to much modern opinion, Suessmilch thought that "it is fortunate when the peasant remains satisfied with his accustomed food, drinks and clothing."¹ In other words, he failed to see that while vanity, luxury and the desire for show restrain men from marrying and so check increase, they furnish the spur to his ambition which leads to higher standards of living; or if he did realize this, he disapproved of it. His objection was founded primarily on the fact that it lessened increase, especially in cities; among peasants and the lower working classes it was of no great effect.¹

The state should maintain the married state in honor, and not tolerate vice or concubinage. Marriage between persons of too great disparity in age should be prohibited, and maternity hospitals should be erected to lessen the fears of child-birth. Immigration should be encouraged and emigration should be restricted so far as possible. Freedom of conscience and religious conviction he regarded as necessary.

Unlike Malthus, Suessmilch came to an optimistic conclusion. Indefinite improvements in agriculture and industry were possible, and this made over-population a matter so far in the future, if it ever occurs, that it need cause no concern. In this his theory is like that of Professor J. B. Clark;² but, unlike the latter, he disapproved of those incentives to higher grades of living furnished by ambition. The effects of higher standards he believed would lead to weakness, as luxury leads to debauchery. This he feared

¹ "Die Auflagen beschwereten keinen so als den Bauer und Handwercksmann, gleichwohl sehe man fast keinen unverheytheten unter ihnen. Die so sich aus Furcht, um nicht arme Kinder zu haben, nicht verheytheten, wären solche die gerne in der Welt was vorstellen wolten." P. 50 (edition of 1742).

² Cf. e. g. *The Philosophy of Wealth*, pp. 98 et seq.

particularly among the peasants and the common laborers of the cities, who constitute the masses. His aim was to procure populousness which meant strength rather than higher standards—quantity rather than quality. This questionable standpoint is due primarily to his fundamental maxim, that populousness is the *summum bonum* of the state, a point of view perhaps more natural for a monarchist of the eighteenth than for a democrat of the twentieth century.

CHAPTER VII

THEORIES OF POPULATION IN FRANCE, 1748-1776

§ 1. *General Survey.* It is a matter of no small importance that the fifty years intervening between the first appearance of the *Esprit des Lois* and the first edition of the *Essay on Population* gave birth to a literature on population more extensive and more thorough than all previous writings on the subject. This literature indicates, for the first time, a widely accepted view which contained the elements of the modern doctrine. The greater attention given to the question was undoubtedly incidental to the reawakening of political and philosophic thought, especially in France. The general economic condition of the masses was, if not more intolerable than before, at least more fully understood. It was this, in great part, which led to the numerous protests against the despotic régime of an aristocracy which had too commonly refused to give heed to the misery of the multitude, and which at best was too far removed from the poor to realize their needs and to devise proper remedies for the popular wretchedness.

There were, however, thinkers who understood the conditions of the time, and these devoted themselves to a more careful study of population and the production and distribution of wealth than had been made in earlier periods. Such study often resulted in protests against what seemed the unnecessarily harsh conditions forced on the people by inhumane administrative practices. The energy of

economists and philosophers was expended in devising schemes whereby the lot of the third and fourth estates might be bettered. To accomplish this, however, it was seen that not only were administrative reforms necessary, but a more intelligent comprehension of fundamental economic problems was essential. The greater emphasis laid upon agriculture as a means of production on which all depended led the Physiocrats into errors, but they made at least an effort to solve the pressing problem of the cause of poverty and to devise remedies for it. The Physiocrats appreciated better than did earlier writers the fact that population needs food and that agriculture was here a matter of greatest importance.

In the first group of writers considered in this chapter we find a most careful treatment of population, and the writers of this group are among the real precursors of Malthus, or, more exactly, they are the best exponents of Malthusianism among the French writers of the third quarter of the eighteenth century. The second and third groups are composed of writers whose treatment is either philosophic and speculative or devoted to discussions protesting against the evils to which the people were subjected. The last group is composed of the *économistes*, or Physiocrats, who, as Higgs says,¹ "were not merely a school of economic thought; they were a school of political action. Kings and princes were among their pupils. The great French Revolution itself was influenced by their writings. And the force of their work is still not wholly spent."

§ 2. *Forerunners of Malthus.* The writers who most deserve to be so styled are Montesquieu, the Maréchal de Saxe, the Comte de Buffon, and John Brückner. The first

¹ *The Physiocrats*, p. 4.

two write from the historical point of view, while the writings of Buffon and Brückner are written from the biological standpoint and suggest the theories of Darwin as well as those of Malthus.

Charles Montesquieu (1689-1755) treats the subject well, especially in its historical aspects, in the twenty-third book of the *Spirit of the Laws*.¹

The females of brutes have an almost constant fecundity; but in the human species, the manner of thinking, the character, the passions, the humor, the caprice, the idea of preserving beauty, the pain of child-bearing and the fatigue of a too numerous family obstruct propagation in a thousand different ways.²

This short passage suggests many considerations, the force of which has too often been ignored by even more modern writers.³ Concerning the strength of the physical tendency leading to marriage he writes: "Wherever a place is found in which two persons can live commodiously, there they enter into marriage. Nature has a sufficient propensity to it, when unrestrained by the difficulty of subsistence."⁴ He adds also: "A rising people increase and multiply extremely. This is because with them it would be a great inconvenience to live in celibacy and not to have many children; the contrary of which is the case when a nation is formed."

¹ Published in 1748. English translation by Thomas Nugent, found in *World's Great Classics* (New York, 1894).

² Bk. xxiii, chap. i.

³ But cf. e. g. Giddings, *Democracy and Empire*, pp. 170 et seq.; *Principles of Sociology*, pp. 335 et seq., et passim. The Darwinian and Spencerian contributions to the subject are reflected in most recent scientific discussions of the problems of population.

⁴ *Ibid.*, chap. x.

Like many other writers, Montesquieu believed that ancient nations were extremely populous and that a depopulation from which the world had not recovered had taken place.¹ In a chapter "on the laws of the Romans relating to the propagation of the species," he declares that there is much worthy of imitation in their laws:

Statesmen should take the same measures throughout the whole extent of the Empire, which the Romans took in a part of theirs; they should practise in their distress what these observed in the midst of plenty; that is, they should distribute land to all families in want, and procure them materials for clearing and cultivating it.

This is one of the recourses which a state also has when it has become depopulated "by particular accidents, by wars, pestilence or famine." Those who survive such calamities are apt to be industrious, and population in ordinarily healthy conditions will soon fill the gap; but this evil is "almost incurable, when the depopulation is prepared beforehand by interior vices and bad government."²

Where there is an agrarian law such as the Romans had,

the country may be extremely well peopled, though there are but few arts. Manufactures and arts are necessary, because land is unequally divided. The owners of land receive more for their produce than is necessary for subsistence, so they exchange with artificers, who are thus enabled to live. Thus arts become very necessary in peopling a country,³

especially under modern systems of unequal distribution of lands and property.

¹ *Ibid.*, chaps. xvii, xix.

² *Ibid.*, chap. xxviii.

³ *Ibid.*, chap. xv.

The necessity of providing regulations to effect an increase of population must be determined according to circumstances.

There are countries in which nature does all; the legislator then has nothing to do. What need is there of inducing men by laws to propagation when a fruitful climate yields a sufficient number of inhabitants? Sometimes the climate is more favorable than the soil; the people multiply and are destroyed by famine; this is the case in China. Hence a father sells his daughter and exposes his children.¹

Montesquieu advises that great discretion be used in providing hospitals and other aids for the poor. Such institutions should be administered with care, for they are apt to be abused as at Rome, "where the hospitals placed every one at his ease, except those who labored, except those who were industrious, except those who had land, except those who were engaged in trade."² In another place he adds that the alms given to a naked man in the street do not fulfil the obligations of the state, which owes every citizen a certain subsistence, a proper nourishment, convenient clothing and a manner of life not incompatible with health. Celibacy is condemned on the usual grounds.

Hermann Maurice de Saxe (1696-1750)³ treats the subject of population very shrewdly in a work entitled, *Reveries or Memoires upon the Art of War*, first published six years after his death.⁴ In a chapter of "Reflections upon the Procreation of the Human Species," he refers to war as "a means for the destruction of the human race," and

¹ *Ibid.*, chap. xvi.

² *Ibid.*

³ Hermann Moritz, Graf von Sachsen, was a Frenchman in his activities.

⁴ In Paris; an English edition appeared in London in 1757.

suggests methods for facilitating increase. There is no doubt in his mind that "the people, almost innumerable, who inhabited Asia, Greece, Tartary, Germany, France, Italy and Africa, have diminished in proportion as the Christian religion has been propagated in Europe, and the Mahometan in other parts of the world." Some change in the institutions established by the Church, particularly in regard to asceticism and a life-long monogamy is demanded. These institutions prevent frequency of marriage,

and the flower of a woman's youth is often spent in waiting for a husband; but nature during this time is unwilling to be deprived of her dues, and commits trespasses by which the generative faculties become at length enervated; debauchery of every kind takes place. . . . Add to this that a woman who bears no children to one husband might notwithstanding to another, because married couples frequently grow irksome to one another, and live in a perpetual state of discord and uneasiness: in short the whole system is repugnant to the law of nature.

His opinion here is in direct opposition to that of Pufendorf, who considered divorce a thing to be prevented except in extreme cases. This difference of opinion is due to the fact that to Saxe the increase of population is something to be desired more than the preservation of institutions which would, even to a small extent, tend to retard increase; whereas Pufendorf's position was more conservative.

Legislators should discourage debauchery and sterility; and reverting to the old ideas concerning the encouragement of fecundity, he says: "Mothers should be given an independent part of the family income [say a tenth], and when they have ten children they should be rewarded by a pension of a hundred crowns; and they should receive a

pension of five hundred for fifteen, and a thousand for twenty children." The most effectual means of peopling the world would be through the enactment of a law providing that "no future marriage should endure more than five years," but to be renewable for a like period if the persons concerned should so desire; otherwise they should separate and have children with other mates. "All the theologians in the world," he says, "would not be able to prove any impiety in this system, because marriage was instituted by divine authority on no other account than for that of propagation."

Though he considered the Christian religious tendencies unfavorable to fecundity in rendering marriage indissoluble and admitting of only one wife, he believed that

The Mahometan religion is as bad in assenting to a plurality; for out of the great number that are married to one man, there is generally but one who is in possession of his affections, and the others, who are converted into his slaves, remain useless with regard to propagation.

If marriages were contracted on the basis of natural inclination and were not strictly monogamous, they would be more productive, and many unnatural and harmful vices would be obviated.

At the end of his discussion Saxe indicates how the race might increase at a geometrical ratio in generations of about thirty years' duration; thus two in the first would result in four in the second, eight in the third generation, and so on. But where marriages are happy it would not be unreasonable to suppose that a more rapid rate would be possible, providing that religion furnished no hindrance and affection had proper sway and the laws of nature were regarded; thus there might be three men and three women

to begin with, who would produce 18 children, and these in turn would have 54, and so on. In the world as it is, such a rapid increase is prevented by various misfortunes and vices.¹

In his well-known *Natural History*,² the Comte de Buffon (1707-1788) expresses some theories which are fundamentally correct, but which would now need a revision as far as the exact conclusions and details are concerned. He regarded man's life, like that of other animals, as dependent on circumstances and environment. In a discussion on the multiplication of "the hare,"³ he takes occasion to show the parallel position of man in his efforts to increase. The over-peopling of certain parts of the earth led to the destructive wars and migrations of the Normans, Huns, Goths and others. In long periods of time these devastations become of no importance, for the gaps are soon filled.

Nature in general is always the same: its movements are performed on two steady pivots, unlimited fecundity and those innumerable destructive forces which reduce the product of

¹ The English translator, who is anonymous, refers to the checks of epidemic and venereal diseases and plagues. The worst hindrance to increase is, however, "that contagious malady which reigns at present; by which I mean luxury: formerly it was confined to the palaces of the great, but now it prevails even in cottages; and it is that which multiplies our wants, and renders children a burden to their parents, because their maintenance and education become thereby attended with extraordinary expenses. We were much happier in those times when plainness and frugality were not accounted dishonorable: the son of a peasant is now brought up with more pride and delicacy than a prince" formerly. P. 190, English edition of 1757.

² Translated by William Smellie in twenty volumes, London, 1812. The work was undertaken and completed between the years 1749 and 1767.

³ Vol. v, pp. 88 *et seq.*

this fecundity to a determined measure and preserve at all periods nearly an equal number of individuals in each species. . . . In estimating the whole human species that ever existed, the number of men, like that of all other animals, ought at all periods to be nearly the same, since it depends on the equilibrium of physical causes. . . . Whatever care man may bestow on his own species he will never render it more numerous in one place but at the expense of diminution in another. When any portion of the earth is overstocked with men, they disperse or destroy each other, and often establish such customs and laws as give too great a check to this excess.

After commenting on the infanticide of China, and the celibacy of France and other Catholic countries, he says that this rule is universal, that "the same restrictions are laid upon man without his perceiving it as are laid upon the other animals: we cherish or multiply, neglect or destroy our species according to the advantages or inconveniences which result from them." Since, then, physical causes are permanent, "the number of the human species, as well as that of other animals, must likewise remain constant and unalterable." Human beings or lower animals may multiply to excess, but when they do, "their number is diminished by the same power that produced them."

Buffon's theory can hardly be called "static," for he recognizes the possibility of increase up to the limit set by the means of subsistence; and he says that population has increased a great deal since the time of the Romans, mainly on account of the greater destruction of ferocious beasts, with which man had to contend in his early struggles for survival. He believed, too, that as man's industry develops, mankind becomes more powerful and better able to resist animals and other destructive natural forces. His theory amounts, then, simply to this, that when population

has reached its natural limits and if progress ceases, population cannot increase. In actual societies, however, there are changes, and improvements are always occurring, so that population can and does increase. It is, however, finally determined by and dependent on nature. These ideas are very incompletely expressed, but they are developed sufficiently to allow us to see that Buffon had an intelligent and well-rounded theory of population.¹

A work which has never been specially noticed, as far as the present writer knows, by any one except Karl Marx, and which should rank with that of Suessmilch as regards the value and systematized form of its contribution to the subject of population, is one by another Lutheran clergyman, John Brückner (1726-1804), with the title *Théorie du Système Animal*, which appeared in 1767.² It is not strictly original, nor is its exposition entirely complete; like most products of the human mind, it is dependent on its environment and is a product of the time. The author refers to both Montesquieu and Buffon, and to several books on travel and philosophy, from which he obtained the fun-

¹ *Ibid.*, vol. vi, pp. 185-187; vol. ii, p. 409.

² Marx says: "Sollte der Leser an Malthus erinnern, dessen *Essay on Population* 1798 erschien, so erinnere ich, dass diese Schrift in ihrer ersten Form (und die späteren Ausgaben stopften nur Material in das alte Schema und fügten neues, aber nicht von Malthus entdecktes, sondern nur annexirtes zu) nichts als ein schülerhaft oberflächliches und pfäffisch verdeclamirtes Plagiat aus Sir James Steuart, Townsend, Franklin, Wallace u. s. w. ist und nicht einen einzigen selbst gedachten Satz enthält. So Brückner, *Théorie du Système Animal* (à Leide chez Jean Luzac MDCCLXVII), worin die ganze moderne Bevölkerungstheorie erschöpft ist." Vol. i, p. 641, note (second edition). The work was printed anonymously, and in the following year an English translation appeared with the title, *A Philosophical Survey of the Animal Creation*. The work is now extremely rare. See *Bibliotheca Britannica* and *Dictionary of National Biography*, *sub nomine*.

damentals of his theory; but for its time, the work is at least as original as that of Malthus was in his.

In a section on "*la loi qui ordonne la multiplication des animaux*," he says that all animals, including man, will increase as far as natural conditions and artificial circumstances will permit. In discussing the "*consequences nécessaires de la loi de la multiplication*," he remarks that as carnivorous animals live on other animals, they are all cut down to their "*just proportions*" when they increase too rapidly. The vegetable kingdom is likewise held within bounds by natural forces.¹ That man is restricted in his multiplication is painfully evident in all large cities especially, where the poor, that is to say the great majority of the inhabitants, are huddled together in miserable quarters and in gutters, resulting in a very considerable loss annually.

There are some, says Brückner, who believe that a people can never be too numerous and who speak of increase as if it always contributed to general happiness, and who consequently continually urge the sovereign to encourage multiplication. The truth of the matter is, however, often far different, depending on the country and circumstances. In a free and enlightened nation, which has great natural advantages and which is protected from the invasion of less fortunate neighbors, increasing numbers are a good. Such a country has a flourishing agriculture, and commerce and manufactures and arts and sciences are under the protection of good laws and institutions; this enables its people

¹ "Car dans le monde animal, comme dans le végétatif, les espèces ne sauraient subsister que dans une certaine proportion avec l'étendue de terrain qu'elles occupent: dès lors que le nombre de leurs individus excède cette proportion, elles décroissent et dépérissent; parce que partout, où il y a surabondance de vie, il y a disette de nourriture." P. 79.

to make profits by exchange and to import supplies from elsewhere, thus extending the natural limits of increase.¹ In countries not so circumstanced increase is worse than useless; it is, as a matter of fact, impossible, and any attempt in this direction can but result in adding suffering and an increased number of deaths.² Savages and barbarians who live by the chase need a vast territory in order to subsist, and even then the pressure of hunger is usually so strong that they drift into habits of violence, rapine and murder.

Coercive forces exist and are necessary in restricting the numbers of all species. If this were not true, the result would be nothing less than a final extinction of all life, and this would happen in a comparatively short period of time. Such obstacles to increase are, then, of the greatest utility and furnish the basis for all progress.³ The retarding forces are obviously more direct among primitive peoples with simple economies than among highly civilized nations, which have indefinite means of supplying themselves not only with necessities, but also with comforts and luxuries. The wiser the governmental regulations are, the more happy and prosperous will a nation be, and among its people primary warfare will play but an insignificant rôle. The two great checks to increase among more advanced peoples as well as among savages are, (1) the want of food, leading usually to strife and war, and (2) pestilence and famine, "*maux affreux*."⁴

¹ P. 81.

² "Tels sont encore les pays, où l'air, la nourriture, la manière de vivre fait multiplier les familles, mais dans lesquels la manque de fertilité empêche la population, comme on voit à la Chine." P. 82.

³ Pp. 94 and 145 *et seq.*

⁴ "La guerre a ses horreurs sans doute; mais il s'en faut bien qu'elle présente un spectacle aussi terrible que la peste ou la famine." P. 111.

The cultivation of the arts and sciences tends to prevent wars and famines, "and perhaps pests," but at the same time, while holding these evils at a distance, it brings other more insidious evils which, though less prompt in their action, tend effectually to check increase; such as luxury, idleness, sensuality, and the decay of morals. The studious and sedentary habits of life developed by large numbers of people in civilized countries also have their drawbacks (though these are not necessarily harmful), on account of the greater stress laid on the spiritual as compared with the physical side of life. Civilization is always accompanied by the establishment of many painful and dangerous occupations, such as mining and navigation, which either increase mortality or check fecundity in one way or another.¹ This is nature's method of maintaining the equilibrium of population in the various stages of its growth and intellectual development. The principle here suggested is one indicating the importance of psychological influences as affecting the tendency of population to increase, a point which, even at the present time, has not been thoroughly investigated.

Nowhere in his work does Brückner refer directly to the effects of prudence on moral restraint, but it seems evident that he takes for granted a justifiable hesitancy in entering the matrimonial state or a checking of fecundity where a lack of necessities is likely to be felt, this hesitancy being confined to the more civilized people. The absence of any explicit discussion of this particular point and the fact that

¹ "Que l'on considère bien tous les effets que produisent les arts et sciences dans la société et l'on verra que, si d'un côté ils multiplient l'espèce humaine, de l'autre ils portent en eux comme de poisons cachés, qui en retardent les progrès, et qui servent de correctifs à l'excès de leurs influences." P. 113.

no attempt is made to state in mathematical form the conflict between natural forces and human desire are Brückner's main differences from Malthus. The conclusions and theories of both are, however, essentially alike.

§ 3. *Philosophic and Speculative Writings; Voltaire, Rousseau, Morelly and Mably.* Voltaire's¹ (1694-1778) writings on the question of population are marked, like nearly all his work, by a characteristic shrewd satire and insight. His main discussion is found in the *Dictionnaire Philosophique*.² He says that "the principal point is not to have a superfluity of men, but to render those we have as little unfortunate as possible." He objects to the views of Wallace and others regarding depopulation since ancient times, and says: "I believe that even Germany, France and England are more populous at present than they were then." Cumberland's estimate of the enormous increase in the centuries immediately after the Deluge he declared absurd. In the *Essai sur les Moeurs*,³ he remarks:

We repeat that men do not multiply as easily as is generally believed. A third of the infants die before they are ten years old. Calculators of the propagation of the human species have observed that rarely favorable conditions are necessary that a nation may increase by a twentieth in a hundred years; and it very frequently happens that a population may diminish instead of augmenting. Certain wise chronologists have supposed that a single family, after the Deluge, who always occupied themselves in propagation and whose children did the same so increased that in two hundred and fifty years the earth contained more inhabitants than it does to-day. Neither the *Talmud* nor *A Thousand and One*

¹ His real name was François Marie Arouet.

² Pp. 795 *et seq.* (Paris edition, 1838), *sub verbo* "Population."

³ In *Oeuvres Complètes*, Tome Seizième (Paris, 1785).

Nights contains anything more absurd. It is not possible to bring forth population by mere strokes of the pen.¹

Voltaire refers to the disastrous effects of war, and praises those who provide the country with subsistence by their labor:

Why should men abandon to hatred, to debasement, to oppression and to rapine this great number of laborious and innocent men who cultivate the earth every day of the year to enable you to eat the fruits thereof; while, on the other hand, men respect, dine and courtesy to the useless and often very wicked man who lives but by their labor and who is rich only through their misery?²

Under the caption "Pourquoi" he asks a series of other striking questions, particularly applicable to conditions in the France of the eighteenth century, but which could well be asked also regarding much of the social and economic injustice of the present.

Regarding the theories of a geometrical increase or progression he has the following to say: "All such calculations concerning this pretended multiplication are foolish chimeras. If a family multiplied in this fashion the earth would not have the wherewithal to nourish the people within two hundred years." He adds that when a country has large numbers of idlers who are lodged, nourished, clad and amused by those who labor, it is certain that the country is fully peopled; but this statement can hardly be accepted except in conditions similar to those under which Voltaire lived. The numerous privileged "idlers" contrasted with the peasants, whose manner of living indicated that they existed on the verge of subsistence.

¹ *Essai*, Tome Première, p. 258.

² *Dictionnaire*, *loc. cit.*

In the *Essai* he speaks of the effects of commerce and industry on human longevity. Among primitive peoples, who are robust and laborious and simple in their modes of living, people ought to enjoy a more regular health and longer life than in the unsanitary environment of modern cities; but that even they could live three or four hundred years is a ludicrous assumption: "C'est un miracle très-respectable dans la bible, mais partout ailleurs c'est une conte absurde." Increase in numbers and long life are dependent directly on nature, the action of which is "like the Fates who were always spinning and cutting. Nature has been entirely busied with births and deaths."

Though the opinions of Voltaire obviously are primarily protests against the evil conditions of the time, and though his statements pass from the scientific to the emotional, there is much in them that is suggestive and valuable, and as a whole they are modern and reasonable.

Jean Jacques Rousseau's (1712-1778) views on population were intimately related to his general political theories. He devoted at least two chapters of the *Contrat Social* (published in 1762) to the subject.¹ The end of political association is the conservation and prosperity of the members composing the political group, and the sign of prosperity is the number of people.

All things being otherwise equal, that government under which, without strange means, without naturalizations, without colonies, the citizens increase and multiply is infallibly the best; and that government under which a population diminishes is the worst. Calculators, this is your business,—count, measure, compare.

Rousseau came dangerously near falling into the common

¹ Bk. iii, chap. ix (translated in *World's Great Classics*).

error of the old nationalists; it was not, however, unpardonable to make such a mistake when speaking in general terms. People saw that rich nations were always populous, and usually regarded populousness and wealth as interdependent. Rousseau was careful to add the saving clause, "all things being otherwise equal;" and with this allowed, it would be difficult to object to his doctrine.

A body politic may be measured in two ways, says Rousseau, namely, by the extent of its territory or by the number of its people;

and there is a suitable relation between these two modes of measurement according to which the state may be assigned its true dimensions. It is men that constitute the state, and it is soil that sustains men; the due relation, then, is, that the land should suffice for the maintenance of its inhabitants, and that there should be as many people as the soil can sustain. In this proportion is found the maximum power of a given number of people; for if there is too much land the care of it is burdensome, and the cultivation is inadequate, and the produce superfluous, which is the proximate cause of defensive wars. On the other hand, if there is not enough land, the state is at the mercy of its neighbors for the needed additional quantity of produce; this is the proximate cause of offensive wars.¹

It is impossible to determine a fixed ratio expressing the most advantageous proportions between the extent of land and the number of men, on account of differences in fertility, nature of products, climate, *etc.* "People may inhabit a small area on the seacoast, even among rocks and sands that are almost barren, because fishing can, in a great measure, supply the deficiency of the products of the earth."

¹ Bk. ii, chap. viii.

Such a concentration near the sea also enables the inhabitants the more successfully to repel pirates, and it is much easier to relieve any threatening over-population by sending the superfluous population to colonies. Peace is necessary for prosperity and increase; wars, famines and seditions weaken or overthrow nations.

We see that Rousseau's views on population are really not much more than a repetition of the views of other writers; but though he was inclined to regard populousness as of more significance than was justifiable, he was able to see that there are limits to increase determined by the amount of land and its products or by the possibility of importation, and that a disregard of the relation of population to its food supply will result in great misery.

The *Code de la Nature* by Morelly is one of the early French efforts to develop a feasible communistic theory. It was published for the first time in 1755.¹ Just as the views of Rousseau on population are a part of his general political theories, so the views of Morelly on the same matter are inextricably bound up with his communism, the fundamental principle of which was "to receive according to one's needs and to work according to one's ability;" a system which he thought would obviate practically all the ills created or fostered by the system of private property.²

¹ Villegardelle, the editor of Paris edition of 1841, says: "Le philosophe Morelly appartenait à ce cercle borné de penseurs profonds que le milieu du dix-huitième siècle vit s'éteindre sans bruit et sans gloire . . . qu'ils n'adressaient qu' à un petit nombre de lecteurs des idées sociales qui nous arrivent par dessous deux révolutions et trouvent encore en retard notre siècle progressif." P. 5. See *Dictionnaire de l'Economie Politique*, *sub nomine* Morelly.

² P. 27. See also p. 53: "Le monde est une table suffisamment garnie pour tous les convives, dont tous les mets appartiennent, tantôt à tous, parce que tous ont faim, tantôt à quelques uns seulement, parce que les autres sont rassasiés; ainsi personne n'en est absolument le maître, ni n'a droit de prétendre d'être."

In the fourth part of the *Code*, Morelly drew up a sketch or "model of legislation which conforms to the intentions of nature." "As the nation shall increase the minor divisions and cities shall also increase." New cities should be added when the total population had expanded sufficiently to permit it without detriment to those already existing. Public magazines for the storing of necessities, *etc.*, should be built by the state, and from these the fathers of each family should be apportioned what they really needed. Each city should be so located that the territory around it would be sufficient not only for the subsistence of its inhabitants, but for the employment of those who could till the soil. If a certain city were located in a sterile part of the country, it should occupy itself especially with the arts and manufactures, and should be provided with foodstuffs from cities located in agricultural districts. Every citizen between the ages of twenty and twenty-five should be compelled to engage in agricultural labor when this was possible.

Every citizen should be compelled to marry on reaching maturity, unless there were some natural obstacle, and celibacy should be permitted only after a person was forty years of age. In the beginning of each year there should be a public festival of marriages; all the marriageable young people should meet, and in the presence of the senate of the city each youth should choose a maiden and, having obtained her consent, take her for his wife. The marriage period should be ten years, after which divorce should be allowed in case either party so desired; divorce should not be encouraged, however, except for good reasons; after one year's time the divorcees should be permitted to marry others in similar positions. At the time of the annual festival mentioned above, an enumeration of the citizens should take place; if there were found to be too many

people, the excess should be sent to less populous cities or be used to establish new ones. When the cities arrived at a stage in which the births and deaths were about equal, an effort should be made to keep them in a kind of *status quo*.¹ Such a scheme would result in the greatest common happiness and the least debauchery.

Morelly's ideas were obviously very Utopian and fanciful. There is not much in them of practical value, but they suggest that a more equitable distribution of wealth and better methods of managing labor and production would make the condition of the masses more tolerable.

Another writer who thought that he discerned in communism an escape from many earthly economic woes was the Abbé Gabriel-Bonnôt de Mably (1709-1785). He referred to the problems relating to population in two of his chief works, *Théories Sociales et Politiques* (first published in 1763) and *De la Législation ou Principes des Lois* (1776). Though his thesis was the desirability of a communistic state, he did not wish population to increase unduly; a population might be too large as well as too small. It is limited, but not definitely, by the amount of cultivatable land. In order to make this limit as comfortably expansive as possible, common property would be far preferable to private; for all land would then be used and to the greatest advantage.² A community of property would also do away with many evils strictly attributable, in their most painful forms, to the system of private property, such as evil ambitions and avarice, and population would be more comfortable, for increase would not cause that suffering which it often does under a régime of private property.³

¹ See "Lois oeconomiques," iii; "Lois édiles," v, and "Lois conjugales," pp. 152 *et seq.*

² *Théories*, pp. 28 *et seq.*

³ *Ibid.*, p. 37.

Rather than try ineffectually to limit or regulate population, so that it might remain in certain happy proportions, it were far better, says Mably, to cultivate all land as advantageously as possible, which would lead to an enormously increased production of food and other necessities, with the consequence that the race would be much happier; this would, moreover, be in harmony with natural conditions and tendencies.¹ At present there are two great classes, the rich and the poor; the one revels in abundance or luxury, while the other suffers misery and want, which necessarily not only checks increase but depraves.

Mably has no completely developed theory of population. His conclusions are about the same as Morelly's and based on similar premises; the great remedy for the misery caused primarily by want and hunger is to be found in a common ownership of the means of production especially, with a just distribution of goods and necessities.

§ 4. *Miscellaneous Writings.* Claude Jacques Herbert (1700-1758), whose *Essai sur la Police Générale des Grains* was published in 1754,² says in regard to the increase of mankind:

It is evident that their number would augment to infinity, were it not for physical, political and moral obstacles. It is sufficient to know that men are always abundant where they find suitable conditions, and that countries have been successively well or poorly peopled according to the nature of the government. Palestine and Egypt which sent out such innumerable armies have been long since practically deserted; but Holland and England, formerly thinly populated, are be-

¹ "Mais j'ajoute que les hommes n'avaient jamais établi la propriété, la terre serait aussi cultivée et aussi peuplée qu'elle peut l'être. Le bonheur ne multiplie-t-il pas les hommes?" *Ibid.*, p. 37.

² In London; there were Paris and Berlin editions in 1755.

coming filled with more subjects every day. Laws and usages favorable to cultivation, and consequently to populousness, cause this difference; and it is easy to see that states are really not peopled according to their natural rates of propagation, but on account of their industry, their productions and institutions.

Like most writers on population, Herbert refers to the ravages caused by wars and pestilential diseases. The natural fecundity of the race is, however, so strong that it tends always to revive and to fill all gaps caused by such misfortunes. These scourges are less harmful than vices which weaken a nation by imperceptible degrees, and the fall of any nation is imminent if remedies are not applied to that languor which weakens agriculture. The subjects are scattered and they perish so gradually that it is not perceived. Everything which tends to discourage the cultivation of the soil, tends to depopulate and impoverish the country.

Men indeed multiply in proportion to the fertility of the soil and the advantages and resources produced by their labors. Their first care is for the necessities; when they find that which satisfies their wants, there is no worry which effectually opposes their augmentation. The colonist has no apprehensions concerning the increase of his family when he foresees that he has the ability to sustain it.¹

And population and commerce increase a nation's strength, but they are finally dependent on agriculture.

Herbert's views are very similar to those of Montesquieu, but are not so fully and carefully developed.

François Louis Veron Duverger de Forbonnais (1722-1800), the last of the great French mercantilists, did not

¹ Pp. 319-325 especially.

pay much attention to the relation of subsistence to population, and the dangers of over-population were in his estimation so slight that they deserved no attention. In his *Récherches et Considérations sur les Finances de France* (1758) he praised Colbert's edict of 1666:

This minister, who should merit so well from humanity, seems to have endeavored to extend the field of his beneficent acts, by encouraging population by a law which we regard as one of the finest monuments of his administration, but which could have been improved in its practical enforcement.¹

Forbonnais treated population in its relation to production in his *Principes Economiques*.² That which one produces above his personal wants is a superfluity, which is, however, far from useless, for it may be exchanged for other desirable things. In order to produce such a superfluity a population must be active in producing the necessities and luxuries of life, and thus be enabled to give an equivalent for what it receives and consumes, and every man who has a superfluity should find a useful consumer.

In this way a population becomes at once a means and producer of riches. Where people have something useful to exchange there population increases and work and production and consumption flourish. All are rich by the reciprocity of needs and the mutual utility of exchange.³

Forbonnais's ideas, then, amount to this, that population and industry are interdependent; and commerce should be encouraged, for in exchange those gains which result in common prosperity and populousness are found. He owed

¹ P. 391.

² In Daire's collection, vol. xiv.

³ Pp. 176-177.

many of his ideas directly to a study of Mun, Davenant and Petty.¹

The *Récherches sur la Population des Généralités d'Auvergne, de Lyon, de Rouen, et de quelques Provinces et Villes de Royaume* (1766) of M. Messance are important, perhaps, chiefly from the statistical point of view; but the author indicates what his general conception of the question of population is in a chapter, "des familles nombreuses." He held that the laws of 1666 did not diminish the number of celibates nor increase the birth-rate. Marriage depended on the will and character of men; their preferences could not be subordinated to the will of the legislator; and the fecundity of marriage depended on causes, largely physical, and absolutely independent of the will of those who were most immediately concerned; it was above human laws. Men were naturally inclined to perpetuate their species; those who preferred celibacy to marriage had in all ages been very few, and this was true in his day. Increase depended on the excess of births over deaths; but deaths and births and the continuance of life were dependent on a variety of circumstances, some not easily controlled or understood.

The Abbé Etienne Bonnôt de Condillac (1714-1780) devoted a few pages of his work, *Le Commerce et le Gouvernement*, to our subject. In a chapter entitled "De l'Emploi des Terres,"² he says that "the same productions are not equally suitable for the subsistence of all kinds of animals, and consequently if lands are used to produce that which can nourish a large number of horses, they cannot nourish as many men as they otherwise could." The size

¹ Cf. Daire, *Mélanges*, vol. xiv, p. 169. See also *Dictionnaire de l'Economie Politique*, *sub nomine*.

² Daire, *Mélanges*, vol. i, pp. 340 *et seq.*

of a population depends directly on the kind of products raised and their amount; and as men consume more or less in accordance with their wants, a population must diminish if the wants increase and the ability to supply them does not increase proportionately; that is, where there is a high standard of living the population cannot be as large as it would be under lower standards. Means of augmenting the desired and needed productions must be discovered if population is to remain comfortable and increase.

In a word there is never a greater quantity of inhabitants in a country than it is able to nourish; the population would be less, all other things being equal, if each person began to consume more than usual; it would be still less if a part of the land were consecrated to producing things from which men received no nourishment.

In deciding on the nature of the things to be produced, it is necessary that the needs of the ordinary laborer be considered, or his class will greatly diminish in numbers. If a laboring man finds that it will be impossible for him to supply the needs of a family, because of a diminished production of the necessities of life and higher prices, he hesitates, or even refuses, to marry; or, if married, his family is not numerous, so that he adds little or nothing to national strength. He concludes that "the employment of lands becomes different as the multiplied wants multiply the articles for consumption, and this results necessarily in a diminution or slow growth of population."¹

There is much that reminds one of Adam Smith in Condillac's view, and his theory that that prudence which results in part from higher standards of living tends to re-

¹ Pt. i, chaps. xxiv-xxv.

tard increase in population especially, if not counterbalanced by other and favoring conditions in production, is one which Malthus did, perhaps, not fully appreciate.

A writer who is not very well known, but whose work is of value in showing the conditions in France which caused a great deal of misery and injustice and checked the country's increase, is Henri de Goyon de Plombanie (— 1808). His *L'Homme en Société, ou nouvelles vues politiques et économiques pour porter la Population au plus haut degré en France* was published in 1763.¹ It is clearly a protest against existing evils, which the author considered remediable and which were at the root of all the misery and poverty which had so effectually checked increase.

Goyon wished to call particular attention to agriculture and the improvement of the conditions of the peasants; for, he says,

if agriculture decays everything languishes with it; and the want of food stuffs, the first necessity, carries with it mortal blows for the state. Without industry there can be no commerce, and without commerce there can be no industry; but without work there can be no agriculture and consequently no men.² . . . Agriculture, the mechanic arts, domestic and foreign commerce, riches, population and the military forces on land and on sea are the true objects on which governments should fix their attention;³ . . . but agriculture leads to the truest source of the power and riches of a state, which is a numerous population.⁴

The class of cultivators had too long been neglected, but in his time, says this writer, it was beginning to receive

¹ Anonymously, in two volumes, at Amsterdam.

² Vol. ii, p. 236.

³ Vol. i, p. 14.

⁴ *Ibid.*, p. 15.

more attention,¹ and deservedly so.² A new administrative division of the country is suggested which should entail a better division of land and a more reasonable division of the people in different occupations, especially as between urban and rural labor. This would do away, in large measure, with unjust inequalities, and mendicancy would be made unnecessary.

A large portion of this work deals with luxury, which he thought had too often been unreservedly condemned by moralists. It is true, he thought, that an insufficient cultivation of land, as well as a too great luxury, is detrimental to increase, but there is another side of the question. The demand for luxuries causes commerce to flourish and furnishes employment to a multitude of men, who would otherwise be forced into idleness, to the weakening of the state. The taste for luxuries augments our desires and needs, and it incites to ambition, which is the principal motive of human activity. It is true that luxury is often based on vanity and folly—but such is man; we cannot change his instinctive passions by denunciations or arbitrary regulations. Statesmen should endeavor to guide this force or instinct along paths where it will do the least harm and the most good. To prohibit luxuries would only excite the desire for them, and in depriving many of the means of livelihood would cause them to die of starvation. The

¹ Vol. ii, p. 255.

² “Cette classe d’hommes que nous estimons grossiers et rustiques, est, à proprement parler, le principal appui de la couronne. Par leurs travaux infatigables, ils soutiennent la vie, et fournissent la subsistance à tous autres ordres de l’état, et des matières premières pour nos fabriques et nos manufactures. Par leur fécondité ils peuplent continuellement nos villes, en remplaçant les vuides occasionnés par un luxe désordonné; ils nous donnent des soldats et des domestiques en quantité.” Vol. i, pp. 51-52.

possession of luxuries and the desire for them, however great the incidental evils may be, prevent at once two great inconveniences: idleness and excessive multiplication. Luxury is really an evil only when the desire for it leads those in power so to oppress the poor agriculturists and laborers that they are deprived of their dues and the necessities of life.

Country life is more favorable to increase than life in cities, on account of the greater salubrity of the air, the wholesomeness of the food, the healthfulness of physical exercise, and the general simplicity so favorable to health and longevity. Well-regulated foundling asylums should be provided in cities, especially to save illegitimates, and dowries should be given to those of both sexes reared in them. Military service and taxes should be made more tolerable, and vice should be limited and regulated, for whether men or women participate in it, it is "contraire à la population." All these suggestions are made with the primary purpose of aiding increase, "pour porter la population au plus haut degré."

Another and very modest writer, who, though not a Physiocrat, deemed agriculture of greatest importance in maintaining and increasing a population, is Pierre Poivre (1719-1786). His views are found most concisely expressed in a little work entitled *Voyages d'un Philosophe, ou Observations sur les Mœurs et les Arts des Peuples* (1768). The needs of a people, he says, depend on a variety of circumstances, such as diversity in climate. Manufacturing must not be neglected; but agriculture is the occupation on which all are finally dependent, for from the fields at least part of the necessities must be obtained. Agriculture flourishes according to the degree of civilization and the advancement in good government; and as people depend on agriculture, it becomes of supreme im-

portance for legislators to be careful and wise in their laws affecting the farmers.

The *Système Social, ou Principes Naturels de la Nature et de la Politique* (1773) of Paul Henri Thiry, Baron d'Holbach (1737-1789), is, like Goyon's work, a covert protest against the evils of French maladministration. He says:

The advantages of a great population are vaunted on every side and efforts are made to produce it. We fail to see that in the nature of things a population must proportion itself to the bounty of the government, the wisdom of the laws, the fertility of the soil, the industry of the inhabitants, and to the liberty and security which the people enjoy. An unjust government already has too many slaves; it gives birth to beggars, vagabonds and malefactors; it enriches one class at the expense of others; it discourages the cultivator; it discourages industry by its enormous imposts; it renders the fertility of the soil useless: far from being able to attract new inhabitants, it forces the old ones to resort to continual emigrations. A country badly governed has always too many people.¹

Land furnishes a nation that which satisfies its real needs, and manufactures give opportunity for other desirable work. Commerce is useful in enabling a country to obtain those necessities or luxuries which nature may refuse it. Money is useful in this way, for when once obtained it is a potent good; ² an abundance of money obtained by

¹ Pt. iii, chap. iv.

² *Ibid.*: "L'argent n'est que la représentation d'un bonheur *en puissance*; il ne devient bonheur réel que pour ceux qui ont appris l'art d'en faire un bon usage; il n'est qu'un mal pour ceux qui ne savent qu'en abuser; une nation bien gouvernée, dont les terres sont bien cultivées, et dont la population est nombreuse, est assez riche et ne doit pas craindre ses ennemis."

trade will make a nation prosperous and strong, for it can buy those things on which people subsist and increase.

The Abbé Guillaume Thomas François Raynal (1711-1796) referred to the problems involved in increase in several parts of *L'Histoire Philosophique des Etablissements et du Commerce des Européens dans les deux Indes* (1770). Populations on continents, said Raynal, are limited in the same way as those on islands, though in the former case the matter is more complicated. In all cases population is regulated by the amount of available subsistence. When a country becomes too populous, colonies are useful in receiving the excess as well as enriching the mother country. The luxury which is generally incidental to great prosperity has debilitating effects, which retard increase. A fair measure of prosperity is, however, favorable to populousness; want and bad institutions check the growth of a country.¹

The Marquis de Chastellux (1734-1788) discussed the relation of agriculture to population in his work entitled, *De la Félicité Publique, ou Considérations sur le Sort des Hommes*. The size of any population, he said, must depend primarily on the state of agriculture.² Modern agriculture and the appliances and inventions connected with it are far superior to those of ancient times, and the amount

¹ See the English translation, London, 1788, vol. I, p. 7 *et passim*.

² "Je nomme l'agriculture avant la population, parce que, s'il arrive qu'une nation peu nombreuse cultive avec beaucoup de soin une grande quantité de terres, il en résultera que cette nation consomme beaucoup, et qu'elle ajoute à l'aliment nécessaire à la vie, l'aisance et la commodité qui en font le bonheur. Si au contraire, l'accroissement du peuple est en proportion avec celui de l'agriculture, qu'en peut-on conclure, sinon que cette multiplication de l'espèce humaine, comme celle de toutes les autres espèces, vient uniquement de son bien-être?" P. 120 (édition nouvelle, 1772).

of food produced is consequently much greater, which permits greater populousness. Population cannot increase beyond the limits of its subsistence.

He entered into the Hume-Wallace controversy, and said that he did not believe the increase of population in modern times was due to commerce and manufactures, but to superior agricultural methods; other industries depend on agriculture, which is then the fundamental occupation. Chastellux advocated greater equality and less favoritism in industry and agriculture; this would make the people happier and enable them to increase with greater comfort.¹

§ 5. *The Physiocrats.* The leading motive of the *économistes* was not, as it had been with so many of their predecessors, to increase the riches of merchants and fill the exchequers of kings; but it was to diminish the suffering and degradation caused by extreme poverty. It is not till the later years of the eighteenth century that we begin to hear many strong voices declaring that populousness is not always the greatest good. As we know, this is the period in which the Physiocrats were most influential.² Though there seems to be no very definite relation between Physiocratic doctrines, as such, and the newer and more rational manner of looking at the question of population, the years which mark the ascendancy of this school correspond closely to the time of the reaction against the old views, which almost invariably lay stress upon the advantages of living in a populous country.

It often seems to the historian that a certain time was ripe for the promulgation of a particular doctrine and yet

¹ Pp. 147, 172 *et passim*.

² Mr. Higgs says that the origin of the Physiocratic school dates from an interview between Quesnay and Mirabeau in July, 1757. *The Physiocrats*, p. 25.

there was no one to proclaim it, or else, if it were proclaimed, it passed unnoticed by the majority of scholars and the generality of the people. This seems to have been the case in the second half of the eighteenth century in regard to population. Both Quesnay and Mirabeau, as well as many others, had stated with considerable clearness the dependence of population on subsistence, but all this had been but little noticed; and so when Malthus published his *Essay* the doctrine struck men as something entirely new.

The general doctrines of the Physiocrats did not necessarily involve this new point of view; some of the writers of this school do not seem to have fully appreciated its meaning, nor was it peculiar to them; most writers of the time refused to accept the old views. Still there seems to be a natural connection between this school and the newer doctrine. The *économistes* throw away the postulates of the old mercantilist writers in regard to the balance of trade and the superiority of commerce and manufactures to agriculture, and this naturally would lead to a study of the capacity of agriculture to support people, and of the relation between the productiveness of agriculture and population. The Physiocrats stood in a position from which they could the more readily and correctly investigate the problem. They could see the disadvantages of large populations which had not sufficient agricultural produce to support them, while the mercantilists were not so apt to perceive any drawbacks here, for their attention was so largely devoted to commerce and essays on commerce that they failed to give adequate attention to agriculture in its relation to humanity and human needs.

François Quesnay's (1694-1774) famous *Analyse du Tableau Economique* appeared in 1758. In maxims xxv and xxvi he says that we should be less attentive to the increase

of population than to the increase of wealth, for the country's resources are certainly greater when the people are well-to-do and when agriculture is prospering than when the population is great but suffering from want of food. Population depends on the means of subsistence and tends to overtake, if not to exceed them.¹

In his essay on *Le Droit Naturel*, he defines natural right as "the right which man has to things conducive to his enjoyment," which includes the right to the means of subsistence, which are the foundation of society. It is ignorance which leads to the enactment of positive laws unfavorable to the best annual production, the largest net product. In the *Tableau Economique* he also makes his well-known division into classes, the sterile, the proprietary and the productive. The last cultivates the land, bringing forth annual returns in food products and supplying the means of subsistence. Subsistence he defines as goods which are necessary for those who can enjoy them usefully for their preservation and happiness. In the sixth observation on the *Tableau Economique* he speaks of the importance of a proper distribution of salaries, which have a direct bearing on general welfare and the increase or diminution of population.

In the *Maximes Générales du Gouvernement*, he says

¹ "La propagation n'a des bornes que celles de la subsistence et elle tend toujours à passer au delà; partout il y a des hommes dans l'indigence." *Maxime* xxvi. Oncken (*Geschichte der National Oekonomie*, pp. 379 *et seq.*) says: "Es drückt unverkennbar den bourgeois-mässigen Charakter der Lehre Quesnays aus, wenn der Streit damals dahin erledigt wurde, 'il faut préalablement des richesses pour accroître la population et des richesses.' Es folgt daraus, 'que le gouvernement doit être plus attentif à l'accroissement des richesses qu'à l'accroissement de la population,' denn die Reichtümer sind es, welche den Menschen Arbeit verschaffen, und nach der Arbeitsgelegenheit reguliert sich die Bevölkerung."

that rich inhabitants should be prohibited from taking their wealth out of the country; and in the *Dialogue sur le Commerce* he remarks that though a state may be able to count a large number of rich merchants who are engaged in maritime commerce, the country itself may remain poor. Merchants care more for their personal gains than the welfare of the masses; the nation's wealth becomes concentrated in a few hands, while the large productive class remains in poverty, and consequently unable to increase.

Quesnay, like Malthus and many others, believed that population is measured by the riches of the country, when the latter are equitably distributed. A large population is desirable, but with this limitation, that the people must be comfortable. While Malthus practically denied the right to subsistence, Quesnay defended it; but as a prudential measure he advocated that men be not allowed to marry before they are twenty-five and women not before they are twenty years of age.¹

The well-known work of the elder Mirabeau (Victor Riquetti, le marquis de, 1715-1789) entitled, *L'Ami des Hommes, ou Traité de la Population*, appeared in 1755. Only a small part of the work is devoted to the subject indicated by the sub-title. In so far as the work discusses population, it takes the ground that a large population is a desirable thing for the state; this needs no proof; it is important to discover the means which make people increase and prosper as well as the means of preventing the opposite. But Mirabeau is emphatic in his statement that population is dependent on the food supply: "La mesure de la subsistence est celle de la population."² Agriculture should, therefore, be encouraged in every way; we depend on it primarily for the necessary food and desirable in-

¹ See Oncken's *Oeuvres de Quesnay*.

² *L'Ami*, chap. ii.

crease. It is not correct to regard the real causes of any diminution in people as due to the unmarried state of monks and nuns, or to wars, or to the great number of soldiers, or to emigration; the true cause lies deeper—in the neglect of agriculture and of the peasant class.

Mirabeau clearly failed to see the real significance to popular welfare of labor-saving devices. He says that the man who keeps a beast of burden, when he could use four men instead, is "an enemy of the people." He condemned the luxury of the age, because it meant the diminution of that which is so valuable a constituent of society—a well-fed working class. Probably his position regarding this matter was amply justified in the light of the conditions prevailing. He does not seem to understand the force of the arguments urged by Goyon on the other side.

On the whole, it may be said that Mirabeau's discussion in the *L'Ami des Hommes* is incomplete and, from the point of view of this present study, unsatisfactory, in spite of the fact that he had a grasp of the fundamental relation of population to subsistence.

The *Philosophie Rurale, ou Economie Générale et Politique de l'Agriculture* supplements what both Quesnay and Mirabeau say in their own works; in general, it is perhaps the best exposition of Physiocratic doctrines.¹

All political, economic and moral knowledge should aim at the encouragement of multiplication and the preservation of those born. This should be the especial care of the sovereign and the end of the science of social government. This must be attended to, not with blind partiality, but with a charity based on correct principles. There is an inviolable law of nature that propagation is without limits ex-

¹ Published in Amsterdam, 1768. According to Dupont, Quesnay wrote the seventh chapter.

cept as it is checked by the amount of subsistence; all laws must be made on the basis of this principle.¹

Man has three great needs—subsistence, conservation, and perpetuation of his kind; but of these three the first is imperative and indispensable. Of the three general kinds of society, nomadic or barbarous, agricultural, and mercantile, the first is the one which is made to feel most keenly the limits set by nature to increase. The merchant class in any country gives a value of exchange and quality of riches to the products of the agricultural class; both commerce and the culture of the soil are necessary in order to permit the proper distribution and handling of the products on which life depends. The strength of a nation in time of war depends primarily not on the number of men, but on the amount of accessible subsistence materials; and it is not by the number of men that the strength is to be determined, but by the ease and comfort in which the inhabitants live. To the means of subsistence there are no exact limits, and consequently the possible increase of population must remain indeterminate.²

Similar views are expressed by Mercier de la Rivière

¹ "Il résulte de cette loi inviolable de la nature que le principe de la propagation est sans bornes, et que celui de sa réalité est astreint aux bornes de la subsistence. Il s'ensuit de là que l'espèce vivante, à qui la subsistence fut donnée avec la plus d'abondance, et par préférence à tous les autres, dut être ou devenir l'espèce terrestre la plus nombreuse. Telle est la règle invariable de la population." *Philosophie Rurale*, p. 3.

² "Les bornes physiques de la population invinciblement assujetties à ses productions, acquerront la même extension. C'est ainsi seulement qu'il faut être peuplateur. Nous avons donc le dénombrement de la population d'après une masse déterminée de revenus. Augmentez les revenus, la population s'étendra à mesure. Lorsqu'une nation tombe dans le dépérissement, la population y excède toujours les richesses." *Ibid.*, p. 70.

(1720-1794) in his essay entitled *L'Ordre Naturel et Essentiel des Sociétés Politiques*. He says that

when a government operates in such a way that the cultivation of land tends continually to approach its best possible state, the progressive abundance of production always precedes the progressive increase of population. Men are born to be happy; and as the highest possible degree of productivity will always remain unknown, it follows that the highest possible degree of prosperity which a well-ordered nation can attain is a measure which no person can conceive. But in a state with a poorly managed government, where cultivation is in a progressive state of degradation, there will always necessarily be found more men than the products can supply, because the diminution of the mass of productions will precede population and drag it down; the earth will then be covered by a great mass of unfortunates destined to a continual misery which will destroy many of them. We see this now and we should try to remove the cause. Laws against mendicancy are vain when conditions are so deplorable. When the salaries are not sufficient to satisfy the needs of men, the disease is felt by every part of the body politic. Statesmen should use their efforts to bring about a favorable balance between consumption and production.¹

Rivière believes that in a well-governed state population will not increase faster than the means of subsistence. He did not consider what was later termed "diminishing returns;" if he thought of it at all, he believed it was merely a possibility of the remote future.

Dupont de Nemours (1739-1764), in the *Abrégé des Principes de l'Economie Politique*, says that production should be so ordered that it suffices for the nourishment of all people. He adopts Quesnay's division into classes, the

¹ Chap. xxxiii; see also chap. ix.

productive agricultural class being the one on which the nation relies for its food. The most advantageous production is that which yields the largest *produit net* and which is of the greatest benefit to the cultivator, and which also supplies by a proper distribution the needs of the greatest number. In a similar way the expenditure which results in the greatest *produit net* is of the greatest profit to the tiller of the soil, for it increases production by making cultivation more careful and intensive. In every case expenditures of wealth and labor should be such as will result in nourishing the greatest number of people, and they should consequently be employed in the most useful lines. The resultant increase in the means of subsistence and general well-being brings with it an increase in national revenues.¹

The right of subsisting (*le droit de subsister*) is invariably united by the natural order with the duty of working (*le devoir de travailler*); the right to riches imposes likewise a duty of working for the interests of the society through which the riches have been obtained. The *classe stérile* has its uses, but not in production, for it is not able to subsist without that which it receives through the proprietors by the labor of the producers, the tillers of the soil; therefore, the real interests of these unproductive classes are the same as those of the producers, and all should work in harmony to procure the greatest net product, with the consequent possibilities of increase and happiness.

Dupont continues his discussion in *De l'Origine des Progrès d'une Science Nouvelle*. The spontaneous products of the earth and sea do not in themselves suffice for a numerous population, nor are all the enjoyments of which men are capable procurable in this way. "It is in man's

¹ Sections 3 and 4 (in Daire's *Physiocrats*).

nature to perpetuate his species, to procure himself pleasures and to flee sufferings and privations." Thus there arises the conflict between his desire to increase and his efforts to be happy and comfortable; to escape the evil effects of the conflict, he endeavors to increase production, especially by improvements in cultivation.¹

Guillaume François Le Trosne (1728-1780) writes about "needs and the means of satisfying them" in some chapters of *De l'Intérêt Social* (1777). Man is endowed with needs which are renewed daily, "and he is imperiously and indispensably forced to satisfy them under pain of suffering death." The Creator knew this, and not only made man a creature possessing needs, but he endowed man with intelligence and strength, and made the earth fruitful.²

Value depends on population and the general well-being of the people. In a nation which has been impoverished by a poor administration, contrary to natural order, two causes concur to deprive productions of that value to which they would otherwise naturally attain. First, population is less, because it always proportions itself to the means of subsistence, although it rather exceeds this than sinks below it. Secondly, there is a great number who desire to live well and consume products, but who are reduced to painful privations. By this Le Trosne evidently means that when conditions are generally bad, people become fewer and poorer, which makes the effective demand for

¹ *L'Origine, etc.*, § 2. Schelle (Du Pont de Nemours et l'Ecole Physiocratique, p. 377) says: "Du Pont éprouva une vive satisfaction en voyant un penseur de premier ordre défendre et développer des idées que lui-même et ses amis avaient indiquées plus des quarante ans auparavant. Malthus avait tendu un peu trop le corde dans le sens du pessimisme; Du Pont le tendait peut-être un peu trop dans le sens inverse."

² Chaps. i, ii.

goods less, with the consequence that money values become lower.¹

Nicholas Baudeau (1730-1792) discusses the relation of production to population in a manner similar to Quesnay's, adopting the triple division into classes, showing the interdependence of each on the others, but with the agricultural class as the one on which all are finally dependent. The tendency of population to press on the food supply is recognized.²

Turgot's (Anne Robert Jacques, 1727-1781) treatment of the population question is at least as valuable as those of Quesnay and Mirabeau. In his essay *Sur le Commerce* (1753),³ he says that the strength of a state, all things being equal, is the possession of the greatest possible number of people. A thinly peopled country is a poor country, and such a country cannot provide means for its defense or men to combat with its enemies without great loss to its agriculture and industry. The riches and the value of the land in a country depend on the number and increase of its inhabitants.

But labor is the true mainstay of a nation's wealth, and wealth is the foundation of natural strength when it is not too concentrated. Every citizen has a right to share in the benefits of national wealth, and consequently he must have the right to labor, *le droit au travail*.⁴ In his *exposé* of the motives behind the famous edict of 1776, by which he attempted reforms to alleviate the condition of the laboring

¹ Chaps. xi, xii.

² *Introduction à la Philosophie Economique*, § 2; *Explication du Tableau Economique*, chap. iii.

³ Section vii. In Daire's *Oeuvres de Turgot avec les Notes de Dupont de Nemours*.

⁴ *Sur le Commerce*, section viii.

classes, he says: "God in giving man needs has made it necessary for him to work, and has made the right to work the property of every man; this right is primary, and the most sacred and undeniable of all."¹

The multiplication of inhabitants increases the revenue of proprietors, for it increases the prices of products through the greater demand for them and it raises rent through the greater competition for land. The improvement of land depends also on the increase of people, since the greater numbers lead to higher prices, which induce men to a more intensive and careful cultivation. Proprietors are then more willing and able to expend sums for improvements on account of greater prospective profits.²

In his leading work, *Réflexions sur la Formation et la Distribution des Richesses* (1766), Turgot divides society into productive and stipendiary classes. Regarding the wages of workers of all classes, he says that they are determined by a competition among them and by their needs of subsistence. The agricultural laborer is the only one whose work is really productive of riches. Turgot's doctrine of the tendency of wages to a minimum implies the tendency of population to a maximum—an "iron law." This tendency it is which effectually restrains increase. A laborer cannot long continue to work for less than is necessary to support him and his family. If he does, he and his family must naturally suffer from hunger and disease, which can but check increase in that particular family. If such cases are common, the population of the country as a whole remains stationary or diminishes.³

In conclusion, we may say that practically every French

¹ Quoted by Garnier, *op. cit.*, p. 288.

² *Sur le Commerce*, sections ix, x.

³ *Réflexions*, §§ vi, vii.

writer of this period recognized the dependence of population on the food supply and its tendency to press upon or exceed the means of subsistence. It was generally believed that most of the evil effects of this inevitable tendency could be avoided by better administrative regulations, or that they could at any rate be removed into the indefinite future.

CHAPTER VIII

ENGLISH, ITALIAN AND GERMAN DISCUSSIONS OF POPULATION, 1749-1775

§ 1. *The Period in General.* The English writers of this period fall into three more or less distinct groups. In the first we may put Tucker, Franklin and Alcock. Tucker represents the old mercantile position in all his discussions; while Franklin's is probably the most scientific review of the relation of population to its environment that we can find in the English literature of the time;—Malthus acknowledged his great debt to Franklin. Alcock's treatment of the problem is a protest against the evil effects of the poor laws.

The next group is the one of which Hume and Wallace were the main representatives. The controversial character of their studies is based on learned researches in classical literature regarding the size of the populations of antiquity, Hume maintaining in opposition to such writers as Cumberland and Montesquieu that ancient populations were not so great as the latter writers supposed, Wallace on the other hand accepting their conclusions.

The last English writers of the third quarter of the eighteenth century, and whose works appeared almost simultaneously, were Short, who advocated especially stringent regulations of vice with the view of increasing population through marital fecundity; Caldwell, who emphasized the importance of industries in maintaining populousness; and Fergusson and Steuart, who should be reckoned among the real precursors of Malthus.

The Italian professors and publicists who entered the discussion of the question of population had generally as clear an insight into the matter as English writers. The first of the Italian writers of this period, the mercantilist Galiani, may be likened to Tucker, while the last one, the Milanese Cervua, made an incomplete study not unlike that of Thomas Short. The other Italian writers were influenced to some extent by Cantillon and the Physiocrats, and in general they may be regarded as accepting the elements of the modern doctrine.

The German writers reflect very largely the spirit and policy of Frederick the Great. They favored the greatest population possible, and in some cases refused to entertain any ideas of over-population. Their efforts were directed toward the discovery of the causes limiting population with a view to determining practical remedies.

§ 2. *Tucker, Franklin and Alcock.* Throughout the whole of his life Josiah Tucker (1713-1799) advocated the increase of the population of Great Britain.¹ His position is stated in his *Brief Essay on Trade* in 1749 and continued to be apparent in practically all of his works. This is especially clear in his *Elements of Commerce and Theory of Taxes* (1755); his arguments here may be summarized under the following heads:

1. Populousness is necessary to the highest development of civilization. A desirable division of labor is impossible where population is scarce.
2. Populousness is necessary for successful trades.
3. Populousness tends to prevent that tyranny over tenants

¹ By far the best and most comprehensive study of Josiah Tucker, and not least in regard to his views of population, is that of Dr. W. E. Clark, entitled *Josiah Tucker, Economist (Studies in History, Economics and Public Law*, vol. xix, no. i, pp. 104-120). The present summary is based largely on this work.

which is often developed in thinly populated districts where a few owners control the land.

4. Numbers of people are the strength of commerce, as industry is its riches.

5. Increase of people causes rents to rise.

6. Populousness makes various improvements, such as good roads, possible.

7. Populousness brings about a constant supply of goods, which enables families to subsist and increase.

Like so many of his predecessors and contemporaries, Tucker had no fear of over-population. Poverty, he held, is largely remediable and the increase of population, with all that it implies, tends to better the condition of the mass of laborers. He says, "it is impossible there can be a want of labor [that is, employment for labor] but where there is want of industry on the one side or the other. For the more hands there are employed, the more implements they will create for other hands."¹

He opposed duties and excises on goods, since they raise the prices which must be paid by parents for the support of themselves and their offspring. Care should be taken in sending men to the colonies, lest by so doing the country's population be diminished; with consequent damage to industry. The vices and debauchery of the rich and the nobility are to be deplored; prostitution of large numbers of women is one of the most effective bars to increase. He speaks with considerable feeling against the vices of unmarried men,² and urges the government to pass laws compelling bachelors over twenty-five years of age to pay "treble king's tax,—poor tax, window tax, and the taxes upon coaches till they

¹ *An Impartial Inquiry into the Benefits and Damages . . . of Low-priced Spirituous Liquors* (1751), p. 33.

² See e. g. *A Brief Essay, etc.*, pp. 404-408 (McCulloch's Collection).

marry; that widowers between thirty and fifty if they have no children shall pay double." Such a policy he thinks "would certainly be attended with many good consequences, both as to the morals and commerce of the nation;" for of ten thousand prostitutes it is fair to estimate that they are not as fruitful as fifty young married women; "by which means the state is defrauded of an increase of upwards of 199 subjects out of 200 every year." Marriage should be encouraged by granting special privileges to married men; divorce should be permitted when the adultery of one of the parties had been proved. If such suggestions were adopted Tucker thought that his ideals in regard to population could be attained, at least to a very considerable extent.

To sum up Tucker's conclusions we may quote the following excerpt from the end of the *Elements*:

A set of politics which promotes industry and discourages vice . . . puts mankind into a capacity of increasing their species without bringing misery on themselves or entailing it upon their posterity . . . the several parts of the great commercial system do indeed mutually support and strengthen each other, inasmuch as populousness hath a natural tendency to promote industry and good morals and these in turn naturally create populousness.

Benjamin Franklin's (1706-1790) chief contribution to the subject is found in his *Observations concerning the Increase of Mankind and the Peopling of Countries* (1751). This essay is short, but as McCulloch says, "The circumstances on which the increase or diminution of population depend are succinctly and accurately stated."¹

He says that tables of marriages and births giving their

¹ *Literature of Political Economy*, p. 253.

proportions to the number of deaths and the number of inhabitants in populous cities are not applicable to rural districts, nor will observations made in Europe apply to conditions in America.¹ People increase in proportion to the number and fertility of marriages compared with the number of deaths; this proportion becomes greater in proportion to the ease of supporting a family. "When families can be easily supported, more persons marry and earlier in life." Many economic conditions operate against early marriage in cities and in old countries, young men not being able to obtain work sufficiently lucrative to permit such action. Luxury is also more common in cities and old countries, which necessitates large bodies of servants who are not in a position to marry.

Europe is almost fully peopled and can therefore increase but little and slowly; but in America land is so plentiful and cheap that a diligent laboring man can in a short time accumulate enough to live comfortably and support a family on his own land; and if he looks into the future, considering how his children when grown are to be provided for, he sees that there is more land to be obtained on condition of labor and with comparative ease. Hence marriages in this new country are generally earlier and more frequent than in Europe and the older parts of the world. "And," he says,

if it be reckoned there [in Europe] that there is but one marriage per annum among 100 persons, perhaps we may reckon two; and if in Europe they have four births to a marriage (many of their marriages being late), we may reckon eight, of which, if one-half grow up, and our marriages are made, reckoning one with another, at twenty years of age, our people must at least be doubled every twenty years.

¹ *Works* (Sparks), vol. ii, pp. 311 *et seq.*; see especially § I.

He adds that even at this rate the territory of America is so vast that "it will require many ages to settle it fully."¹

Among the causes tending to retard or diminish populations Franklin mentions six in particular:

1. "The being conquered," resulting in oppression and heavy taxation, with consequent harder conditions of obtaining subsistence.

2. "Loss of territory;" the smaller the territory the smaller the population must be.

3. "Loss of trade;" when manufactures are exported they draw in return subsistence from foreign countries, and the employment and food thus made available enable many to marry and raise families.

4. "Loss of food."

5. "Bad government and insecure property." People emigrate from countries where such conditions prevail.

6. "The introduction of slaves," which drives poor white people out of employment and centers property in the hands of a few rich proprietors.

Hence the prince that acquires new territory if he finds it vacant or removes the natives to give his own room; the legislator that makes efficient laws for promoting trade, increasing employment, . . . improving of land by more and better tillage, providing more food by fisheries, securing property; . . . and the man that invents new trades, arts or manufactures or new improvements in husbandry may be properly called fathers of the nation, as they are the cause of the generation of multitudes, by the encouragement they afford to marriage.²

Such laws as the *jus trium liberorum* of the Romans may hasten the recovery of a population thinned by war or

¹ *Op. cit.*, § 7.

² *Ibid.*, § 14.

pestilence, and may bring about the peopling of vacant territory; but they cannot increase a people beyond the means provided for their subsistence.

There is no bound to the prolific nature of plants or animals, but what is made by their crowding and interfering with each other's means of subsistence. Was the face of the earth vacant of other plants, it might be gradually sowed with one kind only, as, for instance, with fennel; and were it empty of other inhabitants, it might in a few ages be replenished from one nation only, as, for instance, with Englishmen.

He says that not more than eighty thousand Englishmen had been brought to America, but by natural increase they amounted to more than a million in the middle of the eighteenth century. By doubling every twenty-five years—a moderate rate of increase, in his opinion—this million would in another century result in a greater number of Englishmen in America than in the mother country. And he remarks “What an accession of power to the British Empire by sea as well as by land!”¹

Franklin failed to give the psychological side of the question due attention; but it was natural, from the American point of view at the time, that increase should be regarded about as Franklin regarded it. Few writers had been able to see that the result of progress, greater general culture and refinement which would come with increase contained retarding forces in themselves, even though the general standard of comfort rose or remained stationary. Franklin does say however, that the size as well as the increase of population depends largely on the prevailing kinds of occupations. Indians who lived mainly by hunting required

¹ *Op. cit.*, § 22

vast tracts of land in order to subsist comfortably, whereas a commercial nation could support more people than a purely agricultural one or one which lived on its herds by hunting. We can but admire Franklin's ability the more on reviewing the contents of this essay, which though short is yet so full of all that which is best in the thought of his contemporaries on the problems involved in the increase of mankind.

An interesting essay having a bearing on our subject is one written by the Reverend Thomas Alcock, (1709-1798) entitled, *Observations on the Defects of the Poor Laws and on the Causes and Consequences of the Great Increase and Burden of the Poor* (1752). This work brings out the conflict of ideas involved in the desire to increase the population and at the same time to keep down the poor rates. The writer maintained that the Elizabethan poor laws¹ tended to injure industry and frugality. "The fear of one day coming to want is a strong motive with most people to be industrious, careful and sober and to make use of their youth and health and strength to provide," etc. And the forced and expensive way of relieving the poor "has put many gentlemen and parishes upon contriving all possible methods of lessening their number, particularly by discouraging and sometimes hindering poor persons from marrying."²

He says that any schemes embodied in bills for the naturalization of foreigners, to provide "useful hands for agriculture, manufactures and for the land and sea service, would only increase the evil by bringing to England a shoal of ragged foreigners."³ He says further that

¹ Cf. *Statutes at Large, Concerning the Provision for the Poor* (London, 1733), pp. 2 *et seq.*

² *Observations, etc.*, p. 19.

³ *Ibid.*, p. 20

when a minister marries a couple, though but a poor couple, he rightly prays "that they may be fruitful in procreation of children." But many of the parishioners pray for the very contrary, and perhaps complain of him for marrying persons, that, should they have a family of children, *might likely become chargeable*.

The poor have never ceased from the earth: they have been found to appear more or less in every age and every country. Sloth, extravagance, sickness, misfortunes of fire, of storm or inundation, lameness, blindness, the weakness of infancy and old age:—these causes have never failed nor ever will fail to produce in every country poverty and distress among great numbers.

Among the extravagances of which the poor in England were guilty Alcock mentions the luxuries of snuff-taking and tea-drinking. The tea habit was particularly bad for the poor, for "there is also a considerable loss of time which attends this silly habit, in preparing and sipping their tea: a circumstance of no small moment to those who are to live by their labor."¹ But the worst habit which keeps the poor in poverty and checks healthy increase is that of dram-drinking. His arguments are echoed in the modern temperance literature:

If we look abroad into the world and view the havock and destruction which dram-drinking makes among the common people, amongst whom it chiefly prevails, and consider the miseries and calamities which it brings, by that means, upon the nation in general, every thinking well-wisher of his country must be greatly shocked by such a scene. . . . It consumes the gains and subsistence of people and reduces them to poverty and want; destroys their health and strength and makes them unwilling and unable to work and cuts off the

¹ *Observations, etc.*, p. 46.

thread of life before they have lived out half their days; . . . and exposes them to vice and corruption . . . from which follow a great loss of useful hands to our manufactures and agriculture.¹

Alcock desired increase of numbers and he would encourage marriage in the case of those who could comfortably provide for themselves and their children, but not otherwise; and he would use all means to prevent idleness, drinking, gaming and vice, which bring men to want and distress and diminish or waste the means of subsistence.²

§ 3. *The Hume-Wallace Controversy.* In his *Discourse concerning the Populousness of Antient Nations* David Hume (1711-1776) gives one of the most thorough and systematic treatises ever written on the problem of population from the historical perspective.³ He aimed to prove that ancient nations were not so populous as certain estimates had indicated.

In general, we may observe the question with regard to the comparative populousness of ages and kingdoms implies very important consequences, and commonly determines concerning the preference of their whole police, manners and constitution in government. For as there is in all men, both male and female, a desire and power of generation more active than is ever universally exerted, the restraints which it lyes under must proceed from difficulties in men's situation, which it belongs to a wise legislature carefully to observe and remove. Almost every man who thinks he can main-

¹ *Observations, etc.*, pp. 49-50; cf. also p. 74.

² *Ibid.*, p. 75.

³ In the *Political Discourses*, Edinburgh, 1752. Von Mohl says of this work: "Ohne Zweifel ist die ganze Arbeit das beste was überhaupt vor Malthus über das Bevölkerungswesen geschrieben worden ist (wenn auch in ganz verschiedener Richtung)." *Geschichte, etc.*, vol. iii, p. 424.

tain a family will have one; and the human species, at this rate of propagation, would more than double every generation, were every one coupled as soon as he comes to the age of puberty. How fast do mankind multiply in every colony or new settlement, where it is an easy matter to provide for a family, and where men are no way straitened or confined, as in long established governments? History tells us frequently of plagues that have swept away one-third or one-fourth part of a people; yet in a generation or two the destruction was not perceived. . . . The lands that were cultivated, the houses built, the commodities raised, the riches acquired, enabled the people who escaped immediately to marry and to rear families, which supplied the place of those who had perished. And for a like reason, every wise, just and mild government, by rendering the condition of its subjects easy and secure will always abound most in people, as well as in commodities and riches.¹

Later in his essay he speaks more in detail, basing his remarks on a very thorough study of classical writings. He thinks that slavery, which was practically universal, had a baneful influence on increase, because there were so many hardships and restrictions imposed on the slaves. This was also his main reason for concluding that the ancient slaveholding nations were not so populous as Wallace and others supposed. Foundling asylums, he held, are desirable in a restricted sense only; if there are too many or if access to them is too easy, vice, which hinders populousness, is encouraged. "Enormous cities" too he views unfavorably; they are destructive of the general social welfare, begetting vice and disorder and starving both distant provinces and themselves "by the high prices to which they raise all provisions."² He thought also that small nations are more

¹ Pp. 156, 160.

² P. 183.

favorable to general well-being than large ones: "When nations were divided into small territories and petty communities, where each man had his house and field to himself, and each county had its capital, free and independent, what a happy situation for mankind and how favorable to population!"¹ This idea is obviously Utopian and fails to take into account the almost inevitable quarrels and wars which would more than counterbalance the benefits derived from lower taxation and small personal land-holdings.

Doctor Robert Wallace's (1694-1771) discussion is entitled *A Dissertation on the Numbers of Mankind in Ancient and Modern Times* (1753). Besides indicating the relation between population and subsistence he endeavored to prove that modern nations are not as populous as the ancient ones, on account of the detrimental effects of modern commercial life and the ways of living that have developed with it.

He makes a calculation according to which the human race would naturally increase in a geometrical ratio in periods of approximately thirty-three years; but in a period of some twelve hundred years at this rate the numbers become so incredibly large, that he says, if this had occurred

They must have overstocked the earth before the Deluge. Such a consequence, therefore, quite inconsistent with fact, as well as the experience of the world concerning the proportion between births and marriages, must convince us that mankind cannot be supposed to propagate at so high a rate. It is certain, however, every marriage must produce more than one couple; else, reckoning the period of human life to be 100 years, there could never be a dozen persons alive at any one time. Every couple therefore produces more than one but fewer than two couples. Mankind do not actually propagate according to any constant rule; yet tables of this kind

¹ In the Edinburgh edition (the second), 1809.

(*sic*) may serve to show how the increase of mankind is prevented by various causes which confine their numbers within such narrow limits.¹

The causes of the existing paucity of inhabitants, he says, are manifold; but this is not attributable to a want of prolific virtue, but to circumstances which distress mankind. Some of these are physical and others are moral. Of the physical checks he mentions some as constant; such as temperature, climate or barrenness of soil. More variable checks are the inclemency of certain seasons, plagues, famines, earthquakes, floods and inundations of the sea. The effects of all of these untoward circumstances can be lessened, to a certain extent, "by the skill and industry of men and by wholesome laws and institutions."²

Moral impediments to increase are those which arise from the passions and vices of men; such as, wars, poverty, civil and religious corruption, intemperance, debauchery, idleness and luxury, and "whatever either prevents marriage or weakens the generative faculties of men or renders them either negligent or incapable of educating their children or cultivating the earth to advantage."

Among some "general maxims" governing population he mentions the fact that a rude and barbarous people living by hunting, fishing or by pasturage and without cultivating the soil can never be as populous as an agricultural or industrial people. "In every country there shall always be found a greater number of inhabitants, *caeteris paribus*, in proportion to the plenty of provisions it affords, as plenty will always encourage the generality of people to marry;" and a fairly equitable and even division of property furthers the same end. He speaks of the state's supervision and care

¹ P. 7.

²P. 12 *et passim*.

in regard to these matters: "As the number of people in every nation depends on the number and fruitfulness of marriages and on the encouragements given to marry, wherever the greatest care is taken in this respect, the number of people, *caeteris paribus*, shall be greatest."

Wallace recommended that special attention be paid to agriculture and fishing,

as mankind can be supported only by the fruits of the earth and animal food.¹ Contrary to the usual opinion he thinks that trade and commerce, instead of increasing, may often tend to diminish the number of mankind, and may be not a little detrimental on the whole, as they promote luxury and prevent many useful hands from being employed in agriculture.²

Money is not of such prime importance as the mercantilists would have us believe:

Men live not on money, but on food . . . and if, by greater attention to manufactures than to agriculture, common food become scarce and dear, whatever plenty of money may be supposed in such a situation, there must be great discouragements to marry, as it will be impossible to support families easily.

The studies which Hume and Wallace accorded to population are among the best to be found in the eighteenth century. They agree in the fundamental aspects of the problems involved, but on account of the historical point of view in both cases they come to different conclusions regarding a purely academic matter,—the comparative populousness of antiquity and the present. Hume emphasized the re-

¹ P. 19.

² Pp. 22 and 25.

tarding effects incident to a political economy founded on slavery, while Wallace called attention to the checks developed in a highly industrial community, through luxury and the unequal distribution of wealth.

William Bell (1731-1816) was awarded a prize by Lord Townshend on account of a work which entitles him to a place among English economists—a dissertation on *What Causes principally contribute to render a Nation Populous, and what Effect has the Populousness of a Nation on its Trade?*¹ Bell continued the discussion of population from Wallace's point of view, claiming that modern commerce, arts and institutions tend to diminish population, for there "are not any bounds originally prescribed to humane nature." They divert production, so that it is not applied in procuring the necessities of life, and, through the influx of money, make the prices of provisions high and render the support of families difficult; whereas agriculture and the more useful arts by lowering prices must cause a fall in wages, but to what extent or in what proportion Bell regards as "an idle and useless curiosity."² To encourage agriculture and the more necessary employments, he thought that "of all political institutions none seems more immediately necessary than an equal division of lands." He proposed, therefore, that the right of primogeniture be abolished. He recommended a republican form of government as most favorable to increase, and only after population had increased very greatly would he advise the introduction of commerce and that great variety of industries which produce goods not actually necessary.

This dissertation was attacked by William Temple, "a

¹ Published in Cambridge in 1756.

² P. 19.

clothier of Trowbridge,"¹ in *A Vindication of Commerce and the Arts* (1758).² McCulloch says of this essay, that "Statements and reasonings similar to those of Bell have been frequently reproduced, but we do not know that their shallow sophistry has ever been more completely disposed of than in this tract" of Temple.³ While Bell regarded agriculture as the main cause of populousness, Temple, on the other hand, attributed "populosity" to more varied causes, such as foreign commerce and immigration, good climate and the employment of foreign mercenaries; and he thought that agricultural pursuits and rural simplicity could not in themselves give a sufficient spur to increase population, or to produce wealth beyond the customary necessities and comforts of the workers on land; if these could be produced by three days' labor, the average laborer would work only three days, instead of six, in every week. A great plenty and a great industry must be incompatible, chiefly for the want of the spur to ambition and the temptation to idleness and debauchery. Bell's view is one taken from a narrow Physiocratic standpoint, while Temple's is inspired by a devotion to the advantages of trade.

§ 4. *Caldwell, Short, Ferguson and Steuart.* The Reverend Sir James Caldwell (1734-1781) discusses the dependence of population on economic organization in *An Inquiry how far the Restrictions laid upon the Trade of Ireland by British Acts of Parliament are a Benefit or a Disadvantage, etc.*⁴ Trade, he says, naturally results from the establishment of civil society, and it is absolutely neces-

¹ Palgrave's *Dictionary of Political Economy*, sub *nomine*.

² In McCulloch's *Tracts on Commerce*, pp. 481-609.

³ *Literature of Political Economy*, p. 52.

⁴ Published in 1766, in *Debates Relative to the Affairs of Ireland*, vol. ii, pp. 743 *et seq.*

sary for the maintenance of such a society. It is admitted that the simple necessities of life depend on agriculture and the breeding of cattle; but as a consequence of an advanced and complex social organization, there arises a social and economic inequality, and if agriculture were then the only opening for labor, many must needs be out of employment—in fact, many could not exist at all. But the rich who are found in such a state demand not only necessities but also luxuries, and this widens the opportunities for gaining a livelihood; hence luxuries are necessary, and the commerce and industries which produce them are not evil, but necessary and beneficial.

The strength of a nation is not proved primarily by its populousness, but by its organized maritime and military strength. Thus England's strength lies not only in its trade and people, but in its marine, which protects the shipping. Trade thus protected increases and will fully employ all the people, and this leads naturally to an increase of population; without this protection trade diminishes and numbers decrease.

Caldwell's views were undoubtedly based largely on a knowledge of the works of Hume and others in the preceding decade, and, in another way, the *Comparative History of the Increase and Decrease of Mankind in England and Several Countries Abroad* (1764) of Sir Thomas Short seems to have been inspired by the same group of writers. He says: "To make a nation more populous, cities and towns more healthy, and youth hardier and stronger, these three things challenge the most careful regard: 1. Encourage marriage. 2. Suppress vice and promote virtue. 3. Mend the air."¹ Among the causes which retard or

¹ P. 25.

diminish increase, he mentions "especially swearing, drunkenness and whoredom, and the increasing consumption of spirituous liquors, a passion producing madness, wickedness, disease and death." Luxury in dress and diet, he says, are also "sure back-doors for diseases and death."

He remarks, in connection with his desire to encourage marriage, that foundling asylums tend directly to produce vice, but that orphans' homes to help unfortunate children are desirable.

For it may be easily made appear how directly opposite to this design the building and endowing of foundling hospitals is; and how much they tend to encourage . . . vices. . . . (and to discourage virtue and morality), to the weakening and incapacitating of youth for procreating strong, healthy children and rendering women barren, and in so far depopulating their country and exposing it to the inroads and attacks of its enemies, as well as the contempt of its neighbors and grief of its true and virtuous friends: so nothing can more reflect honor on the Christian name and reformed religion, and tend to the encouragement of marriage, among the poor especially, who are the great strength of every nation, than the building and endowing of orphan hospitals, for the reception and education of indigent and helpless children, whose parents by death or by being in the service of their country, or by long sickness and its consequences, losses, want, decay of trade, and perhaps at the same time a numerous progeny, have brought them to want and misery. . . . Let a tax be laid on bachelors, and be totally and truly appropriated to the support of such orphan hospitals.

Short not only suggested that more stringent and intelligent methods of dealing with vice be used, but he believed that the enclosure of arable lands should be forbidden. This had an obvious disadvantage, in lessening production and

possible increase.¹ To diminish the great mortality of cities he advocated better sanitary administration, and then, if industry were promoted and the purity of the life of the people guarded, population would surely increase.²

Doctor Adam Ferguson (1723-1818) expressed very reasonable opinions regarding population in *An Essay on the History of Civil Society* (1767). He says:

The growth of industry, the endeavors of men to improve their arts, to extend their commerce, to secure their possessions and to establish their rights are indeed the most effectual means to promote population: but they arise from a different motive; they arise from regards to interest and personal safety. They are intended for the benefit of those who exist, not to procure the increase of their members.³

¹ P. 31.

² P. 36. Short wrote another work, in which he discussed the death and birth rates, entitled *New Observations on Town and Country Bills of Mortality*. Corbyn Morris's *Observations on the Past and Present State of the City of London* was published in 1750. A Swedish writer and scholar, Pehr Vilhelm Wargentin, made some scientific contributions to the study of birth rates in *Kongliga Svenska Vetenskaps-Academiens Handlingar*, 1754-1755, 1766-1767. See Harald Westergaard's *Die Grundzüge der Theorie der Statistik*, pp. 363-365. According to Westergaard, writing in the *Dansk Biografisk Lexikon*, a Danish economist and clergyman, Otto Diderik Lütken (1713-1788), announced the so-called Malthusian doctrine a generation before Malthus. He wrote several articles in Pontoppidan's *Oekonomisk Magazin*, which appeared from 1757 to 1764. Some of the articles were also included in an independent work entitled, *Undersögninger angaaende Statens almindelige Oekonomie* (1760) and in an *Undersøgning om Hindringer for Folkemængden* (1761). This writer's brother, Frederick Christopher Lütken, however, accepted the older belief in the efficacy of great populousness, and held that it was not gold or silver which enriched a country, but "work and men;" and he wished to increase consumption not by wasteful luxury, but by increasing the population.

³ *Essay on Civil Society*, p. 214.

In this passage Ferguson points out elements in the problem which had usually been overlooked by his predecessors. Of course, it is not quite correct to say that increase of population does not serve as a motive for economic activity, since the desire to secure means of supporting a family—a motive involving the desire to increase numbers—is one of the most potent economic forces. This Ferguson apparently denies, while emphasizing the more egoistic motive.

The general tendency to increase he states thus: "Men will crowd where the situation is tempting, and in a few generations will people every country to the measure of its subsistence."¹ This statement is concise, but it merely expresses what, even in his time, was generally well recognized. He continues:

The statesman who by premiums to marriage, by allurements to foreigners or by confining the natives at home apprehends that he has made the numbers of his people to grow is often like the fly in the fable, who admired its success in turning wheels and in moving carriages: he has only accomplished what was already in motion; he has dashed with his oar to hasten the cataract; and waved with his fan to give speed to the winds.²

The full force of Ferguson's statement here is one which was not then, and is perhaps not even yet, fully appreciated by legislators and the more intelligent public opinion, certainly not by the uneducated.

The increase of mankind made possible by the accumulation and fair distribution of wealth has its limits. "The *necessary of life* is a vague and relative term; it is one thing in the opinion of the savage, another in that of the polished citizen; it has a reference to the fancy and habits.

¹ P. 216.

² *Ibid.*, p. 217.

of living.”¹ If a civilized man fails to get what he regards as necessary, he is often restrained from marrying and raising a family, whereas a savage with much less would and could rear a numerous progeny. In a civilized country where the standard of living is high or rising, the state’s policy should be so to increase industry that the wealth produced may keep pace with the standard, so that population can increase. These artificial efforts on the part of man are necessary to provide subsistence, but nature has provided for increase by the force of “desires the most ardent in the human frame.” Industry and arts, then, must develop out of common prudence and consideration. “When the possession, however redundant, falls short of the standard and a fortune supposed sufficient for marriage is attained with difficulty, population is checked and begins to decline,” says Ferguson. This cannot be admitted without qualification; it is possible that population might increase in spite of these circumstances, but more slowly, with a falling standard, or a stationary one.

In his *Principles of Moral and Political Science*, published several years later than the *Essay*,² we find what are really his summary and conclusions in regard to the problem. He says:

The number in which we should wish mankind to exist is limited only by the extent of place for their residence and of provision for their subsistence and accommodation; and it is indeed commonly observed . . . that the numbers of mankind in every situation do multiply up to the means of subsistence. . . . To extend these limits is good; to narrow or contract them is evil; but although the increase of numbers

¹ *Essay on Civil Society*, p. 218.

² In Edinburgh, 1792; see vol. ii, pp. 409-410.

may thus be considered an object of desire, and although we may wish, in every instance, that the people should multiply, yet it does not follow that we ought to wish the species thus indefinitely multiplied.

Sir James Steuart's (1712-1780) contribution to the subject is one of the best among the English writers of his generation. It is found in the first book of the *Principles of Political Oeconomy, being an Essay on the Science of Domestic Policy in Free States* (1767). His treatment "of population and agriculture" is quite extensive, but not from the historical point of view so common among writers on population. His aim is "to examine the natural and rational causes of multiplication." Nor is his work based on such theological conceptions as Suessmilch's; he declares that it is not his purpose to examine the supernatural means by which God multiplies the peoples.

Animals multiply in proportion to the food produced "regularly throughout the year." If man did not cultivate the land he would be limited in numbers in a similar way.¹ Nature is prodigal in bestowing life by generation.

Several kinds of animals, especially insects, multiply by thousands, and yet the species does not appear annually to increase. . . . It is reasonable to conclude that what destroys such vast quantities must be, among other causes, the want of food.

The case with man is similar; his numbers vary according to the indefinitely limited amount of subsistence, but his ability to increase remains always greater than is needed.

The generative faculty resembles a spring with a loaded weight, which always exerts itself in proportion to the diminution of

¹ Pp. 18-19.

resistance:¹ when food has remained sometime without augmentation or diminution the spring is overpowered; the force of it becomes less than nothing, inhabitants will diminish at least in proportion to the overcharge. If upon the other hand food be increased the spring will exert itself in proportion as the resistance diminishes; people will begin to be better fed; they will multiply, and in proportion as they increase in numbers, the food will become scarce again.²

In his endeavor to express himself somewhat exactly in terms of related proportions, Steuart ignored the possibility of varying standards of living; in a general way, however, he probably took this for granted as a mere qualification of his principle, not as something which invalidated it. His general conclusion here is "that mankind have been as to numbers, and must ever be, in proportion to the food produced, of the fertility of the climate, and the industry of the inhabitants."³

The influence of the Physiocrats is clear when he says that "agriculture, by multiplying the quantity of the earth's productions, does evidently tend to increase the numbers of mankind"; an industrious people will multiply in proportion to the surplus produce of their farmers. The farmers must have sufficient for their own maintenance, and what is over this is for the consumption of the rest of the population otherwise engaged, who increase as far as the "superfluity of their farmers" will permit.

He believes, contrary to Hume, that slavery was not unfavorable to population; for slaves were generally of the lowest type of people, and would often have perished, or at least would not have increased, had they not been taken in charge by intelligent masters.

¹ Cf. Malthus, *Essay* (third edition), vol. i, p. 28.

² P. 20.

³ P. 24.

Like Adam Smith, and others before him, he saw a relation between the need for labor and its supply. "Scarcity of hands in the country raises the price of labor," which will promote propagation, and this in turn will soon bring the price down to a lower level and slacken the birth-rate.

Regarding the policy of encouraging marriage and fecundity by laws and regulations, he remarks:

Nothing is so easy as to marry; nothing so natural, especially among the lower sort. But as in order to reap, it is not sufficient to plough and sow, so in order to bring up children it is not sufficient to marry. A nest is necessary for every animal which produces a helpless brood: a house is the nest of children; but every man who can beget a child cannot build or rent a house.

Beggars are a burdensome evil in the state, and to prevent their multiplication marriages should be regulated especially in the lower classes. He favors "hospitals for foundlings" in every part of the country; foundlings should be so bred that when they left the hospitals they would represent an injection of good stock into the lower classes. Concerning the effect of machinery on manufactures and the common weal, he says:

The advantage is permanent, and the necessity of introducing every method of abridging labor and expense, in order to supply the wants and luxuries of mankind is absolutely indispensable, according to modern policy, according to experience and according to reason.¹

His final conclusion is like that of Ferguson: "that number of husbandmen is best which can provide food for all the state, and that number of inhabitants is best which

¹ Pp. 123-124.

is compatible with the full employment of every one of them." ¹

§ 5. *Italian Theories.* The Neapolitan Abbé Ferdinando Galiani (1728-1787) published his *Della Moneta* in 1749. In it he says that the true riches of a nation is not the money which it may possess, but it consists in its number of prosperous men. The encouragement and increase of population may be procured in six main ways: (1) Justice, liberty and good laws, which render the state pacific. The practice of correct philosophy and the true religion must be permitted. Such things can in a measure compensate for the lack of a good climate, which has been so influential in peopling districts like Lombardy. (2) Military power, which defends the populace against servitude. (3) The equitable distribution of favors on the part of the government, so that commerce be not reduced and mendicancy be not encouraged. (4) A fair equality in riches, reducing the extent of excessive luxury and the unequal distribution of inheritances, which necessitates or encourages celibacy and vice. (5) The principle of private property must be upheld or the other things are of no avail. (6) Agriculture should be particularly encouraged, as on it depend, to a large extent, commerce and industry, which usually change only the form or transport the fruits of the earth.

The opposite of these conclusions tends to diminish population. Vice, war and pestilence also check population.

The *Dialogues sur le Commerce des Bleds* [Blès] (1770) supplements the discussion in the *Della Moneta*. Here Galiani says that the true wealth of a country is fundamentally dependent on its number of good and beautiful

¹ P. 89.

women. To support them (and population generally) grain (food) is required, to supply which two things are necessary, soil and men—agricultural labor. But as land is limited, so also must be its product; the amount of labor is limited by the product which supports it. When all land is cultivated to the best advantage, the limit to the food supply, and consequently to the number of men, is reached. This limit can never be definitely determined, however, for when agriculture has been carried to its highest point, commerce and manufactures develop and enable men to make exchanges by which the limit to subsistence is extended. It should, therefore, be the aim of every good government to encourage and improve agriculture and to increase commerce and industry; the increase of population, always desirable, is conditioned by these circumstances. Money becomes of great convenience in the trading processes; without it, it would be much more difficult to obtain the imports desired, especially foodstuffs. When a country exports grains, this is an indication that it produces a surplus of food; reliance on manufactures and trade signifies that its population is greater than its own soil can support.

The Italian finance minister Giuseppe Palmieri (1721-1794) treats in several of his works of the conditions on which population depends. In the treatise *Della Ricchezza Nazionale* he declares that although populousness is desirable, it must be remembered that increase depends on the times, customs and a variety of circumstances.¹ The in-

¹ "Quantunque non convenga alla natura della cosa, nè a'presenti tempi e costumi, nè allo stato attuale delle società restringere la quantità del popolo dentro certe confini, pure non può commendarsi il procurarne l'aumento senz' alcun riguardo e senza regola. La quantità del popolo può esser egualmente un bene ed un male, e sarà l'uno o l'altro secondo l'arte e la maniera di adoperaralo." P. 329, vol. xxxviii, *Scrittori Classici Italiani, etc.*

crease of population presupposes two conditions: (1) All individuals should have, or should be able to obtain, some occupation. (2) There must be sustenance to provide for increase. The greater frequency of marriage induced by prosperity leads to an increase in the birth-rate; greater care should then be taken of the children, lest an unduly large number perish.

If at certain times a city or a country does not contain a sufficient number of inhabitants, immigrants should be invited to settle. Useful and industrious citizens are necessary in every community, but their property and maintenance must always be secure. Ignorance and laziness are always detrimental. Unless the state is able to meet its expenses and unless all have land which they can cultivate, or have other means of support, every increase of population, whether through births or by immigration, is certain to bring poverty and misery, effective bars to further increase.

Palmieri treats the problem also in his *Riflessioni sulla Pubblica Felicità*.¹ He considers a large, "just population" obtainable without going to the extremes of the Julian laws; the sexual instinct in man is so strong that increase must follow whenever it is possible.²

Antonio Genovesi (1712-1769), one of the leading Italian mercantilists and for some time professor of political economy in Naples, published his *Lezioni di Economia*

¹ *Scrittori Classici Italiani*, vol. xxxvii.

² "L'uomo per riprodursi e moltiplicarsi non ha bisogno di altro stimolo, che dell'istinto datogli dalla natura [p. 22]. . . . Quantunque la gran popolazione conduca alla ricchezza, alla forza ed alla felicità delle nazioni, non perciò deve essere illimitata, nè a tutte è egualmente favorevole [p. 30]. . . . E il popolo cresce e manca in ragion diretta dell'occupazione, così non può nè deve eccedere i limiti della medesima. L'eccesso sarebbe formato da cittadini miserabili o cattivi" [p. 32].

Civile in 1765. In this work he devotes considerable space to a discussion of population.¹ Every state, says Genovesi, is a political body, and it follows consequently that it is important for the welfare of all that it be as thickly peopled as circumstances will permit. In populousness there is strength, which is the main support of the social organization; in it there is also happiness and prestige. But the number of families must always be in the proper proportion relatively to the means of subsistence (*giusta popolazione*). It is of the greatest importance that the correct proportion be determined. A country which can support only five million people and has really only two and a half, is only half as well peopled as it should be; if it has six million people it is over-populated by one-fifth; a too dense population is then as harmful as a too sparse one.² "Our statesmen cry from every side 'population, population!'

¹ *Scrittori Classici Italiani* (Parte Moderna), vol. vii, pp. 122 *et seq.* A German translation appeared in 1776.

² "E qui innanzi ad ogni altra cosa la definire, che ci vogliamo intendere per *giusta popolazione*. Un paese, che per la bontà, che per la sua estensione, pel clima, per la bontà delle sue terre, pel sito, per l'ingegno degli abitanti, può alimentare cinque milione di persone, se non ne nudrisce che due e mezzo, è mezzo spopolati," *etc.* (*Lezioni di Commercio*, p. 57). "Di tutte le nazioni, quelle crebbero più in numero di famiglie, in umanità et polizia, e meglio aumentarono i commodi della vita e i piaceri, le quale si diedero alla coltivazione delle terre, primo e principal sostegno della vita umana. Primamente, perchè niun'altr'arte non impiega e alimenta maggior numero d'uomini, quanta si faccia la coltivazione; e perciò niuna è più atta a mantenere un maggior numero d'abitanti. Secondariamente, perchè la coltivazione delle terre richiede molte altre arti, che dalla parte loro servano pur esse a mantenere gran quantità di famiglie. Terzo, perchè da niun' altra cosa possono gli uomini ricavare frutti e cibi confacenti alla vita nostra e maggior diletto, quanto dalla terra" (*ibid.*, p. 92). "Le prim' arti fondamentali di ogni stato e produttrici di sostanze, non già di sole modificazioni, sono, con è detto, queste cinque caccia, pesca, pastorale, agricoltura et metalurgica" (*ibid.*, p. 97).

and they forget that too great populousness can become the terrible cause of depopulation, if it is not regulated according to the principle suggested." It is necessary for a growing state to have foreign trade and colonies from which it can draw extra supplies and to which it can send its superfluity of men and certain kinds of products; without these recourses such a nation will be obliged to war on other countries, or its excessive numbers will perish of want and disease.

The main causes of depopulation, which is to be feared as much as over-population, are: (1) bad climate, which is harmful to animals as well as to men; (2) unfertile soil, which cannot support great numbers; (3) ignorance of agriculture, the ameliorating arts and commerce; (4) ignorance and bungling in all kinds of work; (5) exorbitant taxes and the like and a prejudiced judiciary; (6) bad habits of living and all sorts of vices; (7) frequent epidemics, pests, *etc.*; (8) continual wars, foreign and civil; (9) bad civil administration; (10) celibacy.

A Milanese professor of political economy, Cesare Beccaria (1738-1794), best known by his work *Dei Delitti e delle Pene*, discusses the question of population in its relations to industry and agriculture in an *Elementi di Economia Pubblica* (1769).¹ He regards political economy as the art of preserving and increasing national riches and improving their use. Population and cultivable land are the two great fundamentals on which commerce, finance, industry, and political and social organization rest. The conditions which are favorable to increase of people he summarizes under the following heads: (1) Land must be divided among many and not held by a few rich propri-

¹ The edition used by the present writer is that of Turin, 1852.

etors. (2) Arts should be given stability and artisans should be secured in their employment; transportation should be facilitated, and industry and manufactures should be developed. (3) Products should be distributed with regard to needs and not by caprice. (4) The nature of government should be benevolent (but this, he says, is not directly in the scope of political economy). (5) Nutrition must be plentiful; population is limited by the amount of materials for subsistence available at the time; improvements in agriculture, industry and transportation thus become of vital importance in increasing population.¹

Causes of the diminution or checking of population are various and sometimes extraordinary. In a general way, they may be classified as physical and moral. The physical causes comprehend matters concerning the lack of subsistence and well-being. Unhealthful climates, epidemics and diseases are physical detriments, but their force can be diminished by careful attention on the part of doctors and those in whom sanitary control is vested. The first moral cause of checking population is barbarism and ignorance; the second is impurity in customs connected with the sexual life of the people; the third is celibacy; the fourth is the useless and often harmful luxury of certain classes; the fifth is emigration; and the last cause is the increase of cities at the expense of rural districts, with the resultant increase of vice and misery.

The Milanese count Pietro Verri (1728-1797) was a

¹ "È da osservarsi moltissimo che la popolazione ha naturalmente certi limiti al di qua e al di là dei quali non può oltrepassare. L'uomo, tal quale si conserva e si propaga, è un risultato di quelle cose che sono atte alla di lui nutrizione. Queste cose sino prodotte dalla terra, e la terra può crescere la sua riproduzione fino ad un certo segno, ma non indefinitamente, e l'uomo ha bisogno dell'aiuto d'altri animali e della propagazione loro in suo servizio, e questi prodotti." P. 29.

friend of Beccaria, and their treatment of population is similar. Verri's *Meditazioni sulla Economia Politica* appeared in 1771.¹ Like so many writers of this time he devotes the greater part of his study especially to the relations between human and vegetable productivity. General welfare demands that population and the annual yield of food supplies must augment in proportion; otherwise population is not only restrained but great misery arises.² Physical phenomena, such as inundations, earthquakes, volcanic eruptions destroy many people; but they are not so disastrous in their effects as contagious maladies caused by want and misery, which cut populations down to the proportion determined by the annual food supply. When legislators try to increase population without considering this rule, they either fail in their purpose or do much harm.

The prosperity and strength of a state depends on the increase of chances for employment. Laborers must have work in order to obtain wages, by which they procure food for themselves and their dependents. The problem of political economy is to discover how laborers may gain livings most comfortably; in other words, "to increase the annual production as much as may be with the least labor."³

Verri's *Reflessioni sulle Leggi Vincolanti principalmente nel Commercio di Grani* (1769) contains theories like those in the *Meditazioni*.⁴

¹ *Scrittori Classici Italiani*, vol. xv, pp. 187 et seq., chaps. xxi-xxii.

² "Il mezzo più sicuro per conoscere l'aumento dell'annua riproduzione in uno stato si è l'accrescimento della popolazione." P. 187.

³ "Il problema dell'economia politica si è accrescere al possibile l'annua riproduzione col minore travaglio; ossia da la quantità di riproduzione ottenerla col minimo travaglio; data la quantità del travaglio ottenere la massima produzione; accrescere quanto più si può il travaglio e cavarne il massima effetto di riproduzione." P. 190.

⁴ Cf. e. g. the following: "Ma diminuendosi la coltura de grani, con

Another writer of some note, a protégé of the Austrian emperor and of Frederick the Great, and an admirer and friend of Condillac, was Giambattista Gherardo d'Arco (1739-1791), a citizen of Mantua. In the beginning of a work, *Dell'Armonia Politico-Economica tra la Città e il suo Territorio* (1771), the author discusses what ought to be the balance between the population and the commerce of a city or territory. The proper balance is reached when a population has sufficient territory from which to obtain what it needs, agriculture being properly developed and encouraged. Agriculture is fundamental in supplying human wants, but all industries have their place in a well-regulated economic system; manufactures and commerce extend the limits of subsistence.¹

Vanity, luxury, ambition, vice, insatiate desire for wealth often increase the difficulty with which the masses obtain their sustenance; great wealth and excessive poverty are alike unfavorable to increase. A too great concentration of people in cities is harmful, because it brings with it a lack of the necessities of life for many, as well as unsanitary conditions, both of which would cause a higher death-rate in cities than in the country. Vicious celibacy and all kinds of strife and warfare diminish the rate of increase.

To increase population, laws should be enacted which attract commerce and encourage industry, so that the country need not depend solely on its own agricultural resources.

essa deve diminuirsi la popolazione delle campagne, avendo i prati bisogno di molto minor numero de'coloni. Sopra una estensione di terra di trenta pertiche vivono più di tre persone se si coltiva a grano, e appena una sola ne è alimentata coltivandosi a prato. La coltura a prato tende adunque a scemare la popolazione cioè la forza fisica e reale dello stato, essendo il numero degli abitanti la vera e sola misura della potenza di uno stato." *S. C. I., op. cit.*, vol. xxiii, p. 130.

¹ See pp. 34, 37 *et seq.*, 50, 64 *et seq.*, *et passim*.

Small proprietors should be multiplied and the number of the great landowners lessened.¹ One great reason, besides that of bettering economic conditions, for increasing the number of landholdings by division is, that this would make many more persons directly interested in preserving order and maintaining the state. When population and industry strike a balance and when land is well distributed, general welfare will increase and population will increase with it. The happiest state is that in which these conditions exist and which has no cause to fear the effects of opposite conditions.

Francesco Cervua's work, *Altre Idee sulla Popolazione*, appeared in 1773. In it he maintains that the most important aim of political science ought to be to obtain the largest population possible. One of the greatest hindrances to this end he sees in the partly necessary and partly voluntary laxity in marital relations, and in moral depravity, and his endeavors are devoted to examining the causes of these deplorable conditions. Purity of morals, regulation of luxury, restriction of the Catholic priesthood, inculcation of the necessity of divine service, general education and social betterment are his remedies. His work contains valuable suggestions, but the author does not fully grasp the meaning of the problem in its larger aspects.²

¹ "L'accrescimento così della popolazione come del commercio, ed il rispettivo loro miglioramento manifestandosi adunque per effetti necessarj del bilancio della popolazione e del commercio tra la città ed il suo territorio, e tanto l'uno quanto l'altro di codesti bilanci per forza delle addotte ragioni dovendosi riconoscere per prodotti dell'equabile repartizione delle proprietà, in questa dovrà pertanto necessariamente riconstrorsi in principio certo ed infallibile dell'accrescimento della potenza e forza degli stati." Pp. 185-186. See also pp. 124, 136, 144, 173.

² Cf. Von Mohl, *op. cit.*, p. 471.

§ 6. *German Doctrines.* Johann Albrecht Philippi's (1721-1791) *Wahre Mittel zur Vergrößerung eines Staates* was first published in 1753. In the third chapter he declares that the most effectual means of increasing population is the "state's care and generous support of its subjects." The state should be solicitous to facilitate marriages and to establish orphanages, hospitals and similar life-saving institutions. He praises the Chinese practice of depending almost exclusively on human labor—"in substituting men for horses"—and thus making the employment of large numbers necessary. His point of view is so fanatically favorable to large populations that he comes to the conclusion that labor-saving machinery is an evil, and he would like to see the art of printing lost, in which case more people could earn livings by doing the work now done by presses, *etc.*¹ It is not necessary to remark on the general shallowness of these opinions.

If we would know the fundamental maxim of the cameralists, says Johann Heinrich Gottlob von Justi (died 1771), all we need do is to express the word population; and he thinks that their position was the right one. His treatment of the matter is found in the *Grundsätze der Policey-Wissenschaft, zum Gebrauch academischer Vorlesungen abgefasst* (1756), in the second part, with the caption, "Von der innerlichen Cultivirung der Länder oder von Vermehrung der Einwohner." The greatest population goes with the greatest happiness, except in special abnormal instances; and as the greatest common happiness is always desirable, the aim should be to increase numbers as much as possible.²

¹ Cf. Von Mohl, *op. cit.*, p. 417.

² "Aller äusserliche Anbau eines Landes würde wenig helfen, wenn dasselbe nicht genugsam bewohnt und bevölkert wäre. Diese Bevölkerung ist die innerliche Cultivirung, welche der äusserlichen die

To increase the population, then, he advocates the attracting of immigrants by the following methods: (1) There should be freedom of trade and industry within the country. No artificial and onerous restraints should be tolerated. (2) Freedom of conscience and religion. (3) Commerce and industry should be made to flourish. (4) Innocent refugees from all countries should be received and aided. (5) Foreign mercenary soldiers should be employed when possible, leaving the natives free to attend to their business. (6) Foreigners and natives should be equal in courts of law, *etc.*

The native population would increase under the following conditions: (1) Above all there must be a good government. (2) Marriages should be made pure and marrying made easier. (3) People with inherited diseases or who are incapable of procreation should not be allowed to marry. (4) Vice should be treated with severity, as it discourages marriage and lessens fecundity. (5) Foundling homes are beneficent institutions. Illegitimately pregnant women should be so treated that they would not be tempted into crime or to keep their condition or the birth of a child secret. (6) Celibacy among Catholics should be restricted as much as possible. (7) Primogeniture rights should be modified, so that they would not cause so much hardship and hinder marriage and increase. (8) Emigration should be discouraged. (9) The government should endeavor by better sanitary regulations to lengthen the life of the citizens. (10) Dissipation and disease should be

Seele und das Leben geben muss. Daher ist die Vermehrung der Einwohner . . . ein Hauptaugenmerk bey Cultur der Länder, und gleichwie der Nahrungsstand immer blühender wird, je mehr Menschen sich im Lande befinden, so muss man als Grundsatz in dieser Abtheilung ansehen, dass ein Land nie zu viele Einwohner haben kann." Pp. 56-57; *cf.* p. 10.

prevented when at all possible. (11) The necessities of life should be obtainable with the least possible sacrifice.¹

The Roman laws on marriage meet his hearty approval, but he fails to see much that is good in the French edict of 1666. When a statesman makes a law to encourage fecundity on the basis of ten or twelve children, he is probably working more for the sake of popularity than for the common welfare. If a state would do anything in this matter, it should reward fathers of six children; this number is not too great, and such a law would have an effective, favorable influence. The rearing of children, says Justi, is "the only fundamental purpose" of marriage. Neither nature nor sound sense nor the good intentions of statesmen can tolerate any other view. For this reason laws on marriage should expressly embody this principle.

A country's population is most happy when it is centered in a comparatively small space, and a million inhabitants on two hundred and fifty square miles would be more powerful than when scattered over a thousand square miles. Europe could support six times as many people as it did.²

The spirit of the politics of Frederick the Great is apparent in its extreme in the *Erste Gründe der Cameral-Wissenschaften* (1756) of Joachim Georg Darjes (1714-1791). This German cameralist and professor remarks that population is generally the last, whereas it might fairly be the first, thing to be considered in any complete treatise on politics.

Population may almost be said to be the soul of the wealth of the inhabitants of a state. Many neglect the subject out of a

¹ Pp. 64-76.

² Cf. Roscher, *Geschichte der National-Oekonomik in Deutschland*, p. 455.

fear lest the country become too populous. It is my purpose to show the groundlessness of this position. All that is necessary is to establish correct order according to the rules of a true system of politics.

This "true system" implies a regulation of trade and industry favorable to the masses, bringing good wages and sufficient employment. Darjes's idea is the opposite of *laissez-faire*; the state should regulate, but always wisely; the great advantage which the state receives in return for its careful regulation consists in the greater income to the treasury, and consequently the greater national strength. He carries this idea so far that he thinks that even beggars are not undesirable members of a populace.¹ Populousness contributes to security and to private and national prosperity.

Anton Friedrich Buesching (1724-1793) is of the same general opinion in his *Vorbereitung zur Europäischen Länder- und Staatskunde* (1759). To obtain increase he recommends the usual encouragements to marriage and immigration, maternity and children's hospitals, great opportunities for labor, reasonable taxes, and religious free-

¹ "Je grösser die Anzahl des Volks in einem Staate, in welchem Ordnung ist, desto leichter kann die Sicherheit des Staats vertheidigt werden. Und wer wird diesen Satz läugnen, dass ein jeder der sich in einem Staate, in dem Ordnung ist, befindet, der Cammer jährlich etwas einzubringen. Ja, man kann unter dieser Bedingung hievon nicht einmal einen Bettler ausschliessen. Ich will es beweisen, dass ein Bettler der Cammer jährlich zwey Thaler einbringen könne. Er muss doch wenigstens zwey Pfund Brod haben. Dies wird doch wohl der Cammer durch die Mühle, durch das Bakken u. s. f. in dem ganzen Zusammenhange einen Pfennig tragen. Dies ist in einem Jahre 1 Thaler, 6 Groschen, 5 Pfennige. Er trinkt doch wenigstens im Jahre eine Tonne Bier, . . . und dies wird der Cammer 4 Groschen tragen," etc. P. 411.

dom. He has, moreover, certain impracticable ideas of abolishing "carousing and prostitution."

A writer who does not diverge from the typical German attitude of the time, but whose treatment is among the most intelligent, is Jakob Friedrich von Bielfeld in his *Lehrbegriff der Staatskunst*.¹ He tells us:

To preserve society well, it is necessary to have a care for the increase and maintenance of its members. The true strength of the state consists in the numbers of inhabitants; sound political science teaches by what means this end may be attained. The first and most natural is by encouragements to marriage.

Poverty in all its ramifications, says Bielfeld, is the most destructive force with which man has to contend. It is the origin of the unnaturally excessive continence and parsimony of married persons; it is the cause of emigrations and epidemics, and of an infinite number of other evils which injure and depopulate a state. It is necessary, then, to try to make the subjects of a state not only strong and healthy, but opulent; but in spite of all precautions there will always be poor in a country, and the government should make intelligent efforts to relieve indigence. The establishment of orphanages and other benevolent institutions is commendable. Colonies may serve to enrich the country and increase its general welfare and population, but colonists should be drawn from other countries as well, so that the mother country be not depopulated to a harmful extent.² Wars are destructive of "the people, abundance, riches, arts and sciences."³

¹ The original seems to have been in French, 1760; a Spanish edition appeared in 1767. These two, but not the German edition, have been used by the present writer.

² Vol. i, chap. v, sec. xviii.

³ Vol. i, chap. x, sec. iii.

But a state may have too much as well as too little on which to rely for its support. There are certain seeming contradictions here, says Bielfeld; among these are the facts that a state may become too populous under certain conditions and that lands will not be as productive of grains in thinly as in thickly populated countries; that wars, pestilences and other misfortunes are sometimes necessary in order to reduce the number of people to a proper relation with the occupations by which they can gain their subsistence; that certain conditions are necessary if a population is to be comfortably maintained, and these conditions vary according to such circumstances as the size and requirements of the people. The Swiss cantons present an example of a country where extreme populousness is not possible or desirable. Bielfeld compares the great productivity of England and its ability to support numerous inhabitants with Russia, with its much better climate, soil, irrigation and rivers, where so many people have only the barest necessities of life, because there is not a numerous population, relatively to the area. Population depends primarily on the produce of agriculture, and populousness generally favors greater productivity of the soil as well as of industry.¹ Population depends also on industry. The manufactories and shops of London and Paris supply by exchange the needs of great populations, while Switzerland suffers not only from a faulty physiography, but from

¹ Vol. i, chaps. xv-xviii. See chap. ii, sec. 34: "Nous parlons ici de toute la terre prise dans son universalité. . . . Si toute l'espèce humaine augmentoit en nombre l'abondance des grains augmenteroit naturellement à proportion. Il y aurait plus de bestiaux, par conséquent plus de grains, il y aurait plus de mains d'hommes, par conséquent on pourroit donner plus de labours aux champs, on pourroit peut-être bêcher la terre, ou la rigoler, ce qui lui donneroit un degré de fertilité extraordinaire."

the lack of a sufficient industrial development. Inventions should be rewarded in order that industry may be encouraged and improvements for the betterment of all may be fostered.¹

Experience proves that the proportion between the amount of labor employed in agriculture progresses at the same rate as the amount of the product, and that the production of grains may be increased indefinitely if we have more hands to work on the land.

Bielfeld seems to regard the possibilities of intensive agriculture as so great that there is practically no occasion to fear diminishing returns on the amount of labor and capital expended. If the industry and agriculture of a country are properly managed, population can increase indefinitely without suffering, but if the regulations of the state are not wise or if the caprice of individuals leads to too great selfishness, the equilibrium in increase is destroyed, with consequent suffering and a checking of further increase of population.

An Austrian economist and an opponent of the Physiocrats, Joseph von Sonnenfels (1733-1817), accepts the same views as Bielfeld and the Prussian cameralists, in the *Grundsätze der Policy-, Handlungs-, und Finanz-Wissenschaft* (1765). "The increase of society," says Sonnenfels,

includes all the single and subsidiary means which further general well-being. As soon as an institution, or law, proves that it is of advantage to the state or, at any rate, not in opposition to it, we can discover that this is also an evidence that it increases general welfare or is not in opposition to it.

¹ Vol. i, chaps. xxiv-xxvi.

The primary aim of good politics should, therefore, be to increase population, thereby increasing the prosperity of all. The best criterion of the expediency of a law is its probable effect on population.¹ It is the government's business to increase the population as much as possible, consistently with the means of subsistence. But the greater the population becomes, the greater becomes the opposition on the part of foreigners; but at the same time the means of maintaining security increase in proportion, and the less need is there of fear concerning domestic troubles. The more people there are, the more numerous are the ways of earning livelihoods. The more hands the country has, the greater is the diligence of all, and the more intensive and careful the cultivation of the soil. Taxes become less for each individual, while at the same time the income of the national treasury grows apace. Thus politics, trade, agriculture, general welfare and the treasury are all benefited by increasing numbers.

To accomplish this purpose the state should use all the means in its power to encourage fecundity and preserve life, as well as make proper commercial laws and treaties. In this connection Sonnenfels recommends the establishment of maternity hospitals and foundling asylums. In harmony with laws enacted by Frederick, he says that women who give birth to illegitimate children should not be made to suffer shame, but should rather be rewarded by ten *Reichsthaler* "on account of the gift they have made to the state."

One of the leading Germans having Physiocratic ten-

¹ "Nach diesem Grundsatz wird jede Massregel welche zur Beförderung der gemeinen Wohlfahrt ergriffen wird also zu prüfen seyn: ist sie der Bevölkerung zuträglich; ist sie der Bevölkerung nachtheilig." P. 22.

dencies was Johann Jakob Reinhard (1714-1772). He thinks that there need be little fear of over-population if the recommendations of Mirabeau to encourage agriculture and breeding of cattle are followed; on these the support and increase of numbers depend.¹

¹ *Vermischte Schriften*, vol. i, pp. 1 et seq. An *Oeconomische Encyclopädie*, the fourth volume of which was published in Berlin in 1774, contains two articles on population, one on the "Berechnung des Volkes eines Landes," and the other on "Bevölkerung." These articles give a résumé of the opinions of several writers from Graunt to Justi, and endeavor to reconcile the two conflicting theories—that population is always a good and cannot be too large, and that it is limited by the means of subsistence—by emphasizing the importance of improvements of every kind. Their main value, however, consists in the bibliographies appended to each. Encyclopaedic literature on population in the eighteenth century is a reflection of current thought. Cf. e. g. the French *Encyclopédie* of 1765, art. "Population."

CHAPTER IX

THEORIES OF POPULATION IN THE LAST QUARTER OF THE EIGHTEENTH CENTURY

§ 1. *General Survey of the Period.* Practically all writers who discuss the subject, and whose works appeared in the two decades before the publication of the first edition of Malthus's *Essay*, accept the doctrine that population tends to press on the means of subsistence.

Some of them, as the German writers of the type which was most thoroughly in agreement with the politics of Frederick the Great, do not emphasize this side of the question, and often seem to believe that the opposite is true, or can be made so by proper administrative and commercial regulations. But the opinions of the German writers are now divided. In the century after the Peace of Westphalia there were special reasons for desiring to repeople the country, to add to the national strength in men and in national treasure; but, as we have seen, the doctrines of the cameralists and the national school were by no means fanatically favorable to increase without limit and without condition. At the end of Frederick's reign and subsequently to it, several writers revolt from the typical cameralist position, and are inclined to see disadvantages, and not unmixed good, in great populousness.

The French writers, as a whole, do not differ essentially in their theories from the views held by the majority of essayists of the preceding twenty-five years. The Italian

writers, and especially Ortes, accept principles generally similar to those of Malthus.

The English writers discuss various phases of the modern doctrine along the lines laid down in the preceding period. Adam Smith is the main representative of the group, but among them are others to whom (besides Hume, Wallace and Steuart) Malthus was under greater and more direct obligations in formulating his "principle."

§ 2. *The Last German Representatives of the Volksvermehrungspolitik.* Heinrich Ludwig von Hess (1719-1784), a prominent Prussian councillor-of-state, treated the question of population in two works, in his *Staatsschriften* (1772) and in the *Freymüthige Gedanken über Staats-sachen* (1775). Since his aim is the increase of population, his discussion is devoted almost entirely to a consideration of the means to increase popular welfare, which makes increase practically certain.

In the first place, he held that a ruler must endeavor, by all means in his power, to avoid war, because shot and sword, want of food and clothing, and epidemics, all accompaniments of war, often kill more people in one year than natural increase can replace in fifty years. The quiet and plenty of peace encourage fecundity, cause marriage and provide sustenance for children. Even if we assume that as many children are born in time of war as in peace, it must be admitted that they cannot replace, for at least twenty years, the young men whose lives have been prematurely ended.¹

In the second place, it is incumbent on the government to have a care for the preservation of the health of all; "for health is the foundation on which the weal of the

¹ *Staatsschriften*, pp. 279-281.

state rests;"¹ disease in great numbers of people weakens the state's capacity of perpetuating itself. The state should forbid medical quacks and untrained doctors to practice. Good dispensaries should be provided and drug-shops should be subject to official visitation.

There should be a sufficient number of maternity hospitals in which prospective mothers might await their *accouchement* and be cared for for a proper time afterwards.² The lack of such institutions and the existence of an excessive amount of delicacy on the part of women, he said, had often prematurely opened the gates of death and had robbed many a child of its right to life. Foundling-houses should be established; even the clergy were beginning to recognize this necessity, said Hess. Immorality could not be driven out of the world by a refusal to alleviate the misery inflicted upon illegitimate offspring by it. Hospitals for the general care of the sick should also be maintained to save the lives of valuable citizens.

Marriage should be encouraged by removing the unnecessarily great number of fees demanded by the government, the priest and the church warden. But though virtue should thus be made easier, it is not advisable to pass laws to punish men for illicit indulgence. Such punishments could but do harm and could not change man's instincts.³ Openly flaunted vice should be checked and punished, however, for it is the prolific cause of disease and debility and results in a decrease in fecundity.

The police should see that the prices of necessities are not too high. The state should provide for security by permitting only such judges as administer their business impartially. A *pupillen-collegium* should be established for

¹ See pp. 281 *et seq.*

² P. 291.

³ See pp. 305 *et seq.*, 308-310.

the purpose of taking care of inheritances and the relation of administrators to wards. Differences of religious conviction should not be allowed to have an unfavorable influence on civil rights; toleration should be strictly guarded. Foreigners should be attracted by promises of personal advantage, and such promises should be adhered to. The government should provide popular amusements, and restrict, in so far as this could be done without infringing on personal liberty, harmful luxuries. Finally, the state should see to it that children are well brought up.

Hess also advises the study of the natural sciences as a means of promoting general welfare by lessening human ills; investigations of a hygienic nature regarding water, air, *etc.*, would promote health. Capital punishment should be abolished.¹

Hess's works contain many valuable suggestions, but ludicrous error and a prejudiced naiveté are so commingled with the good that the tone and value of this discussion cannot be said to be high.²

A less erratic and more thorough writer was Johann Friedrich von Pfeiffer (1718-1787). His treatment of our subject is found in the *Lehrbegriff sämtlicher ökonomischer und Cameralwissenschaften* (1770-1778), in a *Grundriss der wahren und falschen Staatskunst* (1778),

¹ "Ein ohne die allerhöchste Noth ausgesprochenes Todesurtheil ist ein unersetzliches Uebel; . . . er kann einen Menschen umbringen und er muss desfalls doch nicht zum Tode verdammet werden, . . . lässt man aber diesen Verbrecher am Leben, so kann er den Schaden durch eine zahlreiche Familie oder auch auf eine andere Art gut machen." *Freymüthige Gedanken*, p. 232.

² Von Mohl remarks concerning the *Freymüthige Gedanken* (*op. cit.*, p. 432): "Ist es nicht ein Segen, dass eine solche Albernheit und Gedankenverwirrung jetzt doch wohl unmöglich in Wissenschaft und Leben geworden ist?"

and finally in the *Berichtigungen berühmter Staats-, Finanz-, Polizei- und Oekonomischer Schriften dieses Jahrhunderts* (1781).

The state, says Pfeiffer, should give its main attention to the welfare and the increase of its population.

Population may be encouraged in two general ways, either by means of its own increase or by attracting foreigners to the country. The first method is the cheapest, the surest, the most useful; the second is uncertain, costly and involves many inconveniences.¹

Regarding the most suitable age for marriage, he said that in the male sex it is from the twentieth to the forty-fifth year and in the female from the fifteenth to the thirty-sixth; "as soon, therefore, as these ages are reached both sexes should marry."²

The life of a soldier is unfavorable to increase, because dissipations too often ruin him in purse and in health. The celibacy of the Catholic clergy is also harmful; and young people in good health who remain unmarried are unjust to the Fatherland.³ He disapproved of polygamy under ordinary circumstances, but in special cases, such as, after the number of young men has been reduced by a half or more through war or other causes, while the number of young women remained the same, polygamy should be permitted.⁴ In times of long-continued peace, however, when the proportions of the sexes remain approximately equal, this would be harmful to increase; many young men would be obliged to remain single, and vice

¹ *Lehrbegriff*, vol. ii, part ii, p. 20.

² *Ibid.*, p. 36.

³ *Ibid.*, pp. 33, 44.

⁴ *Ibid.*, p. 40; see also *Berichtigungen*, vol. i, p. 435.

with all its evils would grow and act as an effectual check to increase.

Over-population is not possible if a nation is well situated for commerce, has a good navy, and if it has a flourishing export trade of manufactures. When, on the other hand, the country is mountainous and given up to wine culture or cattle-raising, and is surrounded by powerful neighbors on which it must depend for bread products, it can easily have too many people; and an isolated community, dependent on its own resources, is limited by the amount of its own produce.¹ Ordinarily, however, these conditions are not present, and care should be taken to increase numbers, by providing maternity and children's hospitals and the like, and the peasants should not be oppressed by burdensome taxes, *etc.* Dowries should be given to poor girls, and in all cases marriage portions should be regulated so that they do not prevent marriage or by their size encourage marriage for ulterior motives.

A well-proportioned population is inseparable from the felicity, the power and the continuity of a state, and "the foundation of these conditions lies in the increase and maintenance of healthy, diligent, respectable and well-meaning people."² Wars, emigrations and oppressions should be prevented, and the state should provide the best social, political and sanitary regulations in its ability. The "art of

¹ "Lebt endlich eine Nation von aller Gemeinschaft und Verbindung mit anderen Völkerschaften abgesondert, so kann sie freilich nur eine bestimmte, der Menge des Getreidebaues proportionirte, Anzahl Menschen erhalten; und auf dergleichen in Europa nicht stattfindenden Fall, kann ich zugeben, dass man die Grenzen der Bevölkerung nach dem Verhältniss des Getreidesegens, zu welchem man in mittelmässig fruchtbaren Jahren Hoffnung hat, zu fördern alle Kräfte anstrengen muss," *etc.* *Lehrbegriff*, p. 47.

² *Ibid.*, p. 57.

making gold" is of use only in so far as it promotes "the great art of providing bread for the people."¹

The famous Prussian minister, Ewald Friedrich von Herzberg (1725-1795) read a dissertation on population before the Berlin Academy in 1785,—*Sur la Population des Etats en général et sur celle des Etats Prussiens en particulier*. The work gives evidence that the author was acquainted with the best existing literature on the subject, but that he had learned little from it.² His argument is simply a defense of Frederick's policy. He accepts the mercantile doctrines in all essentials, and says of the two hundred thousand Prussian soldiers that they are no burden to the country, as the ignorant rabble would have us believe, but a real blessing and help to the nation. The army does not diminish, but increases population, and by putting money into circulation enables the people the more easily to pay their taxes. He believes that the power of a state lies in the number of the people, and that riches and happiness depend on the means of satisfying the needs and comforts of life; but his ideas concerning the attainment of these ends are so obviously full of error that we wonder how he could speak of Adam Smith's work as "deep and classical," and still differ so fundamentally with the latter's ideas and conclusions.

Herzberg's discussion was probably not regarded even

¹ *Grundriss*, preface.

² "Les principales nations de l'Europe ont des ouvrages plus ou moins bons sur la population. Cette partie a été traitée en France par des hommes célèbres tels que Vauban, Boulainvilliers, Deparcieux, Montesquieu, Mirabeau, Expilly, Messence, et en dernier lieu par Mr. Moheau, . . . auxquels on peut ajouter les articles très-amples de la population dans l'Encyclopédie et dans le Dictionnaire Universel." P. 2. He refers also to Petty, Davenant, Hume, Adam Smith, Young and the Swedish Pehr Vilhelm Wargentin, and others.

by its author as a complete exposition of the subject; it was simply a bit of apologetics and politics. Von Mohl pronounced the work a composition of the views of his predecessors among German cameralists, deriving its importance largely from the fact that the author was one of Frederick's most influential ministers, not from any intrinsic merit.¹

Heinrich Jung (1740-1817), a professor at Marburg, wrote a *Grundlehre der Staatswirthschaft* (1792),² in which he took the same position as Sonnenfels and others of the same school. A population which is busy and happy is the foundation of every good political system. The sum of the happiness of individuals equals the nation's welfare; great populousness should be encouraged, for it is conducive to the happiness of all. He advocated governmental aid for women with illegitimate children; if necessary the government should take charge of their offspring. There is no excuse for any one's lacking the means to marry; diligence and industry are all that is necessary, and they are always possible.

Of the lesser writers of this group we mention only F. W. Waldeck, whose work, *Ueber die Unzertrennlichkeit der deutschen Bauerngüter*, appeared in 1784. His general opinion is that "population contains the ground of all kinds of felicity."³

§ 3. *German Precursors of Malthus.* Christian Wilhelm

¹ Von Mohl, *op. cit.*, p. 473. Herzberg's dissertation was short, consisting of only thirty-two pages, and is found in the *Mémoires de l'Académie Royale des Sciences et Belles-Lettres*, 1785. See also the *Mémoire sur le Règne de Frédéric II, Roi de Prusse*, par le Comte de Herzberg, 27 janvier, 1793.

² Sub-title: *Ein Elementarbuch für Regentensöhne und alle die sich dem Dienste des Staates und der Gelehrsamkeit widmen wollen.*

³ P. 108.

von Dohm is the first writer of importance among the Germans of this period who showed hesitancy in accepting the doctrine that populousness and increase are always desirable. Other writers admitted that there were checks to increase, but all believed that such restraints, whether moral or natural, were to be deplored and remedied if the means in the state's power could do so.

Dohm remarked, in a work on *Die bürgerliche Verbesserung der Juden* (1781), that

The governments of all great European states appeared to agree in the fundamental doctrine, that the continual increase of population was the essential condition on which the general welfare depended. It was believed that civil society would be most surely upheld and protected from all foreign foes, that natural products and the elaboration of these by industry would be most effectually furthered, that commerce and exchange between nations would be most advantageously carried on, and finally that the common weal would be increased, if the state managed to keep its population always increasing. It followed naturally then that the aim of every civil society was to attain this desired end.

Dohm was unable to accept this typical view. He held that this doctrine needed considerable modification and several limitations if it were to be regarded as correct. The size of every population must be determined by the extent of the state's territory, as well as by the possibility of extending its natural resources, manufactures and trade. Population could not increase beyond the means of its support; if these means were capable of indefinite expansion, the number of people could increase in proportion; an excess could not increase the welfare or strength of the country, but would add to its misery.¹

¹ Pp. 2-3 *et seq.*

In a work entitled *De l'Economie Politique Moderne; Discours fondamental sur la Population* (1786), by Herrenschwand (1730-1796),¹ we find a good exposition of the doctrine of population as developed by the best thought of the century. He says that there are two conditions necessary for human increase, procreation and sustenance.

The race can increase only in proportion to the amount of sustenance, it matters not how frequent conceptions may be. The desire to perpetuate seems to be unlimited; the sustenance of men however has limits. As long as population has not reached the limits of sustenance it is capable of continued increase; but from the moment in which it reaches these limits, it ceases to be capable of increase.²

In any consideration of the question of population the industrial stage of the people must be given attention. The three chief stages, says Herrenschwand, are represented, first, by peoples who live solely by the chase; secondly, by pastoral peoples; and thirdly, by peoples engaged in agriculture. The last stage is practically always characterized by the growth of commerce and manufactures. The sustenance of peoples in the first stage depends entirely on the products of the soil. If nature should prove at times capricious, they would suffer hunger and die in great numbers. Peoples in the second stage are limited in increase also directly by the bounty of nature, not so directly as those in the first, however. The development of agriculture is indicative of human foresight; the products of the soil, when stored, manufactured or exchanged, provide for

¹ Not much is known about the life of this writer. A German edition of his work (the one the present writer has used) appeared in Halle, 1794.

² Pp. 4-5.

unforeseen contingencies; and on account of the greater stock of goods always available, the population is enabled to increase far beyond the limits set by the more primitive hunting and pastoral stages. In times of drought or other misfortunes, the latter are compelled to migrate, or to engage in war and marauding, and they suffer from the efforts of neighboring tribes or peoples who are in a similar position.

A noted Göttingen professor, August Ludwig Schloezer (1735-1809),¹ is another of the German scholars who refused to admit the claims of the old school of doctrinaires. His theory of population is not presented in any one work, but is found in various connections in his voluminous *Stats-Anzeigen* (1782) and in his *Briefwechsel*.

"Only twenty years ago," says Schloezer,

every one was crying "population." Experience has proved that this, like every other principle of political science, has its limitation. Deserts or half waste lands are peopled in one way, and fully peopled, productive districts are peopled in other ways. It is necessary to have a care for bread as well as for people; this is the government's business. Bread makes men, but the reverse is not always true.²

He deplored the effects of vice and referred particularly to what he deemed the exceptionally bad conditions in France. Vice causes sterility; and even among the children resulting from illicit unions, he said, only a twentieth as many as of legitimate children survive. Vice exercises a baneful effect on population chiefly in three ways: first, it causes disease; second, it causes practical sterility; and

¹ Schloezer was a member of the academies of Munich, St. Petersburg and Stockholm, and was highly regarded by contemporary scholars.

² *Briefwechsel*, vol. ix, p. 93.

thirdly, it is the cause of great infant mortality and crimes incidental thereto. Schloezer refers also to the methods adopted or advocated later by the so-called Neo-Malthusians in regard to prudence. Such methods, which had permeated to the peasants from the higher classes of the cities, he considered most reprehensible.¹

Population can increase with good results only where the manner of living is moral and not uncongenial. The true measure of a people is not simply the necessities of life, but the facility with which ownership in land and employment are procured. The productivity of a country is not the sure sign of its prosperity; general comfort ("Wollen, l'aisance") and a reasonable distribution of wealth, especially of landed property, are the truest gauges of the possibility of populousness. Great numbers of small and comfortably situated small proprietors are desirable, and every one must be given employment; every man has a right to employment to gain the means of living.²

It is true, as a rule, that the life and strength of a state depend on the number of its inhabitants, but just as in the body too much blood is harmful, so also may a population be so excessive in numbers as to cause misery rather than happiness. The equilibrium of men with the need for men and the subsistence available for them must be constantly maintained. A hungry populace is of no advantage, and unemployed men must perish or emigrate to other countries, possibly strengthening one's enemies. Over-population leads to mendicancy in well-governed districts, as in certain parts of Germany; but in ruder coun-

¹ *Briefwechsel*, vol. iv, p. 136.

² "Ein gesunder Mensch, der keine Arbeit kriegen kan, ist ein Ankläger der Regierung (und hat das Recht den ganzen Gesellschaftsvertrag, folglich auch 7te Gebot aufzurufen)." *Ibid.*, p. 137.

tries, as in Croatia, it produces great numbers of thieves and robbers. Just as a too thinly populated country may be weak for lack of men, so a too thickly populated state may be weak, because of the misery or the vices of its citizens; what we need is the golden mean, a population proportioned to the extent of the domains and the amount of available means of subsistence.¹

Justus Möser (1720-1794), whom Roscher styled the greatest German economist of the eighteenth century and the father of the historical school in its relation to legal studies,² discussed the problems of population in several parts of his *Patriotischen Phantasien*.³ He is one of the foremost precursors of Malthus in Germany.

Increase in numbers, without due regard to other necessary considerations, was far from being always a good; a large birth-rate counterbalanced by a large death-rate is the inevitable result of unreasonable increase and encouragements to marriage;⁴ crime and vice follow. Half the children who are born perish because of such conditions. If a family continued to receive an additional member every two years, this would, on an average, give each family ten children. If half of these children were daughters and they

¹ *Briefwechsel*, vol. ix, p. 297.

² *Geschichte, etc.*, p. 500.

³ Four volumes, Berlin, 1804.

⁴ "Es ist überhaupt jetzt eine wunderliche Welt. Die grossen Herren, diese Zerstörer des menschlichen Geschlechts, denken auf nichts als auf Bevölkerung; und wir werden sicherlich nächstens ein philosophisches System erhalten worinn die möglichste Vermehrung der Menschen als die grösste Vorherrlichkeit Gottes angepriesen wird, blos um eine Menge menschliches Vieh anzuziehen, welches sie auf die Schlachtbank liefern können. Allein die Bevölkerung will es wahrlich nicht ausmachen. Wir ziehen Bettler und Diebe damit an; das ist es alles." Vol. i, p. 217.

married and brought forth children at the same rate, as some legislators had apparently desired, the result would inevitably be great want, debauchery and crime. Virtue, politics and industry all become demoralized by too great populousness.

Such a rash increase did not occur in actual societies in spite of the efforts of law-givers and the useless advice of certain scholars. Men could see, in a measure, what the results would be, and this realization acted as a preventive of such attempted multiplication. Moreover, the positive hindrances, such as hunger, squalor and disease, never failed to make excessive increase of this kind impossible. These had been the cause of the exposure of children in China; in Peking especially, this practice had been almost necessarily resorted to; for the Chinese did not fully understand the importance of prudence.¹

§ 4. *French Theories.* In respect to the subject of the present study it may be said that the Abbé Theodore Augustin Mann (1735-1809) was the most important writer in French of this period, although his work has been overlooked or ignored by practically all economists. He was a true precursor of Malthus, though there is no probability that the latter was at all acquainted with his writings. His theories were presented to the *Académie impériale et royale des Sciences et Belles-lettres de Bruxelles* in 1775, 1780 and 1781, and in some scattered writings. Mr. J. J. Thonissen first called attention to Mann in a communication to the same academy in 1871, under the heading, *Un Précurseur de Malthus*; and a summary of Thonissen's review was presented by Mr. J. Lefort in the *Journal des Economistes* in 1876, under the same title. But writers on the history

¹ Vol. v, p. 98.

of political economy and encyclopædists seem to have been ignorant of the work of this Belgian abbé.¹

His first essay was entitled *Mémoire sur les Moyens d'augmenter la Population et de perfectionner la Culture dans les Pays-Bas Austrichiens*. He declared that as the "degree of population is measured by subsistence," where there are the most products there are also the most men. The true causes of depopulation and national weakness he believed to be the decadence of agriculture on the one hand, and the growth of great luxury and excessive consumption by classes who neither produce means of subsistence nor increase numbers on the other. He saw obstacles to increase also in the increasing concentration of property, which does the whole people great harm in increasing luxury and vice and in ruining commerce and agriculture. Large estates and establishments necessitate many menials, who are unable to marry and are often given to debauchery.

In the second *Mémoire* (1780), Mann devotes his attention to the question, *Dans un pays fertile et bien peuplé, les grandes fermes sont-elles utiles ou nuisibles à l'Etat en général?* He contented himself with the moderate statement that "a laborious and numerous people, in a country abundantly supplied with its needs, is the riches and fortune of the state." The ideal consists in an equilibrium between the number of consumers and the amount of riches which active and fruitful labor can produce. Misery, discouragement, disease and vice are the usual lot of superabundant populations pressed into a narrow space, where labor furnishes insufficient resources and where the excessive num-

¹ Mann was born in York and, after leading a very checkered career, died in very humble circumstances in Prague. He was a member of the Academy of Brussels.

ber of hands establishes a low rate of wages. Suffering and degradation, but in a less degree, are also common among barbarous, nomadic peoples, who, though they have a vast territory, do not employ their efforts in the best manner.

Is it possible to increase population when a desirable equilibrium exists and still maintain general well-being? On the affirmative answer, said Mann, depends the right of legislators to desire and encourage increase. If the answer is in the negative, it is the duty of the state to recommend prudence.

In 1781 he read another *mémoire* to the academicians of Brussels, entitled *Réflexions sur l'Economie de la Société civile et sur les Moyens de la perfectionner*.¹ He discussed the significance of the diffusion of useful knowledge, the division of lands and the development of agriculture, and the introduction of new branches of commerce and industry in their relations to subsistence and population. Then he asked: "Is it possible for a population to remain in equilibrium with the food supply when it is increased to the greatest possible extent?" His answer is as follows: "This equilibrium is evidently impossible among a people with good morals, because population naturally increases in an indefinite progression, while the means of subsistence are necessarily limited by the soil."²

It would seem that this statement contains the essence of Malthusianism. Bad morals, as the preventive check, are necessary, according to both Malthus and Mann, in order to maintain the equilibrium of population and sustenance. Good morals tend to result in increase, "indefi-

¹ This *mémoire* was read December 20, 1781, and remains in MS. It is in the Royal Library at Brussels, no. 20389.

² *Mémoires* (1781), vol. v, p. xiv.

nately" according to Mann, in a "geometrical ratio" according to Malthus. Prudence, as a practical force, does not affect the masses; poverty, with resultant vice and disease, will cut down their numbers. Thonissen thinks that of the two statements, Mann's is the more correct, and "conforms more to the nature of things," though the Malthusian formula is "more scientific in appearance."¹ The present writer is inclined to agree with this estimation; but there is no doubt that, in spite of the mathematical terminology used by Malthus, his work is a more complete exposition of the problem.

The *Récherches et Considérations sur la Population de la France*, by M. Moheau (1733-1820), was published in 1778. Moheau declared that the first duty of every citizen was to enter into wedlock and to beget children. In society as it is, however, it must be admitted that celibacy in some individual instances is not reprehensible, but is indeed apparently desirable. Many men engaged in the military service find that celibacy is the more advantageous state, and seem thereby to retain more of those necessary manly qualities of character and greater physical strength. The church, too, has found that the unmarried state is the better for those devoted to its service.² The men who have done

¹ See *Bulletins de l'Académie Royale des Sciences, etc.*, second series, vol. 31 (1871), p. 448.

² "Le premier devoir d'un citoyen est de subir le joug du mariage; et un des plus grands services qu'il puisse rendre à la société est d'augmenter le nombre des individus qui la composent. Les gens mariés forment la classe des citoyens la plus utile, et parce qu'ils servent à la reproduction, et parce que les enfans sont des otages qu'ils donnent à la patrie." P. 79. But, "on a observé que la plupart des monumens dus à la générosité des particuliers, sont l'ouvrage des célibataires. C'est dans cette classe qu'on trouve les actions du plus grand courage, le mépris de la vie, les sentimens généreux par lesquels l'homme semble s'élever au dessus de l'humanité." Pp. 80-81.

most for science and literature have been unmarried and without children. In the French Academy there have been three celibates to one married man. But these considerations do not vitiate the general proposition that the generality of men owe it to the state to perpetuate the race.

There are physical, moral and political causes which affect the population of the state, sometimes favorably, at other times unfavorably. The increase is primarily dependent on the excess of births over deaths and emigration. This excess is often small in cities, but in rural districts it is usually one-fourth larger, and this enables the whole population to increase. This is explained by the fact that cities are not so healthful and vice is apt to flourish in them. Moheau objected to Franklin's theory that the limits of population are determined by the number of men the country can feed and clothe. Such a limitation is applicable to the earth in its entirety, but not to any nation in particular. The population may be much greater than would be possible on the basis of its own agricultural produce, if the inhabitants find supplementary means of subsistence, through industry and exchange, with other parts of the world.¹ But Franklin really admitted as much, while emphasizing the other side of the question.

Jacques Necker (1732-1804) treated the problem in his two chief works, *Sur la Législation et le Commerce des Grains* (1770) and *L'Administration des Finances* (1785). "Political economy," he said,

ought to consider the amelioration of the conditions of the masses and is forced to admit that the power of a state does not rest simply on the magnitude of its riches, but more especially on the number of its inhabitants; and if this number

¹ Pp. 267-274.

is able to increase only when there exists a happy harmony between the different classes, population becomes the surest gauge of the union of felicity and strength.¹

Riches and population are two sources of power, but population is a far more certain quantity. Wealth and the means of subsistence may be acquired in several ways, but when wealth in the form of money is concentrated in a few hands or where wealth is acquired more at the expense of population, the country cannot be happy. Population and wealth should increase in proportion or else wealth should increase faster than numbers of people; the people will thus remain happy or their well-being will be increased. Governments should endeavor to bring about this desired state of affairs; but this requires continual effort, for the number of men tends to increase in proportion to the general felicity.²

In actual societies governments have usually failed fully to accomplish these purposes. The increase of population seems to lead inevitably to some misery among the lower classes; but the amount of misery thus caused varies according to circumstances, and can be alleviated to a great extent by a more equitable distribution of wealth and public burdens. The poor are less able than the rich and cultured to resist their impetuous desires, and the results affect them more painfully. The pain and misery due to excessive

¹ *Sur la Législation, etc.*, part i, chap. iii. Cf. also the following (chap. iv): "Les richesses de l'Etat . . . ne seront composées des biens qui sont essentiellement nécessaires à cette population; on ne pourra donc point comprendre alors sous le nom de richesses, ni la terre qui nourrit les hommes, ni les avances en outils, en animaux, en bâtiments, en denrées nécessaires pour la semence ou pour la culture; tous ces genres de biens font comme partie absolue de la population, car on ne peut séparer l'homme de sa subsistance."

² Chap. vi.

multiplication, which is due to irresistible desire, cause population finally to check itself; when numbers of men exceed the amount of subsistence, an increased mortality holds population in check. This check is, however, seldom felt in its full strength; natural scourges and the self-destroying passions of men almost always arrest natural progress.¹

In the *Administration des Finances*, Necker wrote of the effects of epidemics, disease in general, the variability of climate, war and emigration, all of which serve either to diminish or to retard the growth of population; "but," he added,

such is the annual progress of generation that at the end of a few years the population of an industrious commercial community will again reach the measure of its subsistence. Thus, when cultivation increases, when the interior means of communication are easy, and when the rich proprietors exchange the products of their lands for the diverse products of industrial labor, the principal sources of increasing population, seem assured.²

Luxury when indulged in to excess, as is so common, cannot fail to harm and check population. The rich *blasé* needs his lackeys, and their labor is for the most part wasted and removed from production; besides his own luxurious and unnecessary extravagances, he consumes enough to supply many families with food, diminishing the amount of subsistence available for the consumption of the people and hindering their increase.¹ Excessively large military forces in time of peace also operate against general welfare. They take up considerable quantities of land and they make no real return for all they consume. Another drawback to increase is celibacy of every kind. An exten-

¹ *Ibid.* and chap. vii. ² Vol. i, *petite édition originale*, p. 146.

sive system of clerical or other celibacy too often means a moral decadence, which enfeebles the whole people, checking increase by lowering the proportionate number of births. The immoral celibacy of libertines is, however, confined almost exclusively to large cities, as is vice in general, so that the population is not ordinarily seriously checked by its existence. It is not so much vice as poverty which restrains increase in the rural parts of the country. Though the births in rural districts usually far exceed the number of deaths, the great misery and poverty of the peasants cause the rate of mortality among their offspring to be so high that increase is slow and often only aggravates the general poverty. The state must seek to remedy these conditions; the causes of a large part of existing misery are removable.¹

One of the best-known speculative treatises on human progress is the *Esquisse d'un Tableau Historique des Progrès de l'Esprit Humain* (1794) by Marquis de Condorcet (Marie Jean Antoine Nicolas Caritat, 1743-1794). The fundamental theory of the book is based on the ultimate "perfectibility of man" and as such involves an optimistic view of the problems of population.

Condorcet said that man in his endeavors to better his condition always seeks to augment the means of subsistence, at least in proportion to his increase in numbers; for man depends on food and his multiplication is conditioned thereby. Where wealth decreases there is much consequent suffering as well as depopulation. This law of increase is a serious one. Can man in his progress rise above the evil effects of the tendency indicated by this law?² On the answer the

¹ *Ibid.*, pp. 147-149 et *passim*.

² "Mais dans ces progrès de l'industrie et du bien-être, dont il résulte une proportion plus avantageuse entre les facultés de l'homme, et ses

foundations for a rational optimism or pessimism must rest. Condorcet was an optimist.

Our hopes for the welfare of man in the vague Utopian future must depend on the three following considerations: the destruction of inequalities among nations; the progress of equality among the same people; and the true perfection (*perfectionnement réel*) of man himself.

All nations ought to advance in civilization until their peoples become most enlightened, most free and devoid of prejudices, along the road indicated by the French and the Anglo-Americans. Other peoples laboring under the despotism of kings or barbarism and ignorance will free themselves from such bondage. . . . The human species will ameliorate its own condition by new discoveries in arts and science and, by a necessary consequence, in the means of individual well-being and in general prosperity; intellectual, moral and physical faculties will be perfected. History, experience and observation all justify the belief that nature has not placed a term to our hopes in these respects.¹

In the modern state there are three principal causes which

besoins, chaque génération, soit par ses progrès, soit par la conservation des produits d'une industrie antérieure, est appelée à des jouissances plus étendues; et dès-lors, par une suite de la constitution physique de l'espèce humaine, à un accroissement dans le nombre des individus; alors, ne doit-il pas arriver un terme où ces lois, également nécessaires, viendroient à se contrarier? où l'augmentation du nombre des hommes surpassant celle de leur moyens, il en résulteroit nécessairement, si non une diminution continue de bien-être et de population, une marche vraiment retrograde, du moins une sorte d'oscillation entre le bien et le mal? Cette oscillation dans les sociétés arrivées à ce terme, ne seroit-elle pas une cause toujours subsistante de misères en quelque sorte périodiques? Ne marqueroit-elle pas la limite où toute amélioration deviendrait impossible, et à la perfectibilité de l'espèce humaine, le terme qu'elle attendroit dans l'immensité des siècles, sans pouvoir jamais le passer?" Pp. 285-286 (edition of 1822).

¹ *Ibid.*, pp. 263-265.

hold progress somewhat in abeyance; they are inequality in riches, inequality in the means of subsistence and inequality in instruction or education. But these inequalities, said Condorcet, undoubtedly with a vivid recollection of the changes of 1789, are disappearing and will continue to become of less and less importance in the future, until the millennial perfection is attained.¹ "Organic perfectibility or degeneration of species in the vegetable as in the animal world may be regarded as one of nature's general laws."² This law is therefore applicable to the human race. Progress in conservative medicine, the use of better food and housing, a manner of living which would develop strength by exercise without destructive excess, and finally the annihilation of the two greatest causes of human degradation, misery and too great riches,—will prolong the duration of life and assure health and robust constitution. "Man will of course not become immortal, but is it not possible that the distance between the moment in which he commences to live and that in which he ceases to live may be increased without limit?"³

Virtue, enlightenment and freedom, understood in the broadest sense, are the slowly acting panaceas by which man is to be saved, according to Condorcet.⁴

§ 5. *Italian Theories.* Filippo Briganti (1725-1804), a Neapolitan, was the author of an *Esame Economica del Sistema Civile* (1780). A state is made progressive and vigorous, said Briganti, by the number of its inhabitants and

¹ *Ibid.*, pp. 271 et seq.

² *Ibid.*, p. 304.

³ Cf. Bacon's *Prolongation of Life*.

⁴ Two other French works should be noted: Saint Cyran's *Coleul des Rentes Viagères* appeared in 1779, and it resembles the works of Messance and Moheau in its treatment of mortality records with applications to insurance. Duvillard de Durand wrote a similar work, published in 1787 and entitled, *Recherches sur les Rentes*.

the perfection of their talents, that is, by an industrious, intelligent population. Populousness is the result of two main causes, which he called physical and moral. Under physical causes he classified land and water, and under moral causes are included property and industry, honesty and temperance; where these matters are given proper attention a population becomes numerous and strong. Man depends on subsistence for his living and increase, and it is according to the scarcity or plenty of provisions that a population is miserable or happy.¹ The size of the earth and its productivity place physical limitations on the multiplication of mankind.

The possible populousness of any country varies according to its natural resources; the possible populousness of the earth as a whole is not definitely determinable, because improvements of all kinds and their effect are uncertain. Some countries produce comparatively little of the direct means of subsistence; such countries must have small populations, or, if they are populous, they must depend on manufactures and commerce, not solely on the products of their own soil. Property and property rights are of particular importance to a nation relying thus on commerce and exchange; for in times of want they have that which they may trade for food and raiment.² Not only a citizen's existence,

¹ "Si è detto che per multiplicar la specie umana su la terra prima convenga seminarvi de'grani e poi degli uomini. E tal detto reviene all'assioma economico: che la sussistenza sia la misura della popolazione. . . . O che egli ripeta i sussidj della vita dalle classi inanimate o che li ritroga dalle classi inanimate sempre dee riconoscere dalla terra l'alimenta che lo sostiene. . . . Quest'equilibrio economico tra la sussistenza a la popolazione, pare che si diffonda in tutte le specie de'vivente." *Scrittori Classici Italiani* (Parte Moderna), vol. xxxv, p. 225.

² "La proprietà è la prima delle cause morali preparate dalla natura ad incorrigiar la popolazione. Si la misura della popolazione è la sussistenza, la sussistenza non si possiede senza una ragion privativa sin mezzi di sussistere." *Ibid.*, p. 269.

therefore, should be protected, but also his possessions. Commerce, navigation, the arts and sciences and manufactures facilitate the consumption and practically increase the production of goods which are necessary for man. The demand for food products is thus increased and agriculture, on which man depends for his primary wants, is encouraged.

That which most effectually checks increase is poverty, which means insufficient means of subsistence. When many men are out of employment, when the rich consume goods with reckless extravagance, when the poor develop a kind of inertia, population tends to remain stationary or even to diminish. One of the first effects of such conditions is the tendency of men toward celibacy and consequently toward licentiousness. The laws of primogeniture often have similar results. Wars are clearly disastrous from this point of view. Colonies may serve to furnish room for an unemployed surplus population, or they may to some extent depopulate the country, or by the trade to which they give rise they may enrich the mother country. Colonies are, however, usually founded because of the desire to dominate and for commercial reasons. In all considerations of population statesmen should weigh these things, and remember that a large population does not necessarily imply that the people are happy.¹

In the *Scienza della Legislazione* (1780) of Gaetano Filangieri (1752-1788) we find that views very much like Briganti's are expressed.² This author says that the true

¹ "Perche la prosperità della popolazione non tanta risulta dal numero eccessivo quanto dal numero proporzionato alle circostanze locali." *Ibid.*, p. 319.

² The work is found in the *Scrittori Classici Italiani*, vol. xxxii. The work was partly translated into English in 1794 by William Kendall. The second part, entitled *Delle Leggi Politiche ed Economiche*, contains the discussion on population.

objects of political and economic laws are two, population and riches. The state has occasion for men, and men must have means of subsistence; and their number is always proportioned to their happiness. These two objects which compose national felicity are reciprocal and interdependent. No encouragements to marriage and fecundity can avail, unless the obstacles to general welfare be first removed; and "it is on this rock that the greater part of legislators have struck."¹ In spite of their encouragements sterility has continued or procreation has been slow: "In the very bosom of voluptuousness marriages are rare; a vast grave, in which a whole generation with all its posterity disappears, is daily opening, and Europe has need of and could contain at least an hundred million more inhabitants."² These encouragements might have been effective or would not have been needed at all, if some of the fundamental obstacles had been removed.

The obstacles to which legislators should give their attention are especially,

the distresses of the people and the wretched state of agriculture;³ the luxuries of courts and the miseries of the country; the excess of opulence in the hands of the few and the want of necessaries in the majority;⁴ the small number of proprietors and the immense number of those who are not proprietors; the multiplicity of resources united in a few hands;

¹ P. 19, Kendall's translation.

² *Ibid.*

³ *Cf.*, "Si è detto che tutto quello che tende a render più difficile la sussistenza, tende anche a diminuire la popolazione." *S. C. I.*, vol. xxxii, p. 53.

⁴ *Cf.*, "Le leggi agrarie sono state sempre le prime leggi de' popoli nascenti. Il primo oggetto di questi leggi è stato d'assegnare a ciaschedun cittadino una egual porzione di terreno; il secondo è stato di procurare che questa distribuzione ricevesse la minore possibile alterazione." *Ibid.*, p. 58.

the abuse of estates; the caprice of laws and the rapacity of finance; the establishment of standing armies and the celibacy of soldiers; the misfortunes which their maintenance occasions among the people, and the chasm their celibacy leaves in generation; the progress of public incontinence and its origin, poverty, and the sterility consequent thereupon.¹

Other hindrances to increase are the exorbitant and inalienable riches of ecclesiastics. Filangieri opposed the system of primogeniture for like reasons.

Filangieri's work is one that was typical in its attitude toward the question of population. When thinking of population and increase he was forced to consider popular well-being; and he came to the very common conclusion that inequalities, political and economic, and all kinds of vices are the main causes of infelicity and slow increase of population. A government with the welfare of its citizens at heart should seek to remedy such conditions and abuses.

The best and most complete treatment of our subject among the Italian scholars of this time was by the Venetian monk Giammaria Ortes (1713-1790). His work should rank with Hume's *Discourse* and Suessmilch's *Göttliche Ordnung* as among the best works on population before the publication of the *Essay*. There can be little question, as von Mohl also says, that Malthus was ignorant of the existence of this work, which was entitled *Riflessioni sulla Popolazione delle Nazioni per rapporto all'Economia Nazionale*. The *Riflessioni* of Ortes were published only eight years before the *Essay*, but they seem to have been written between 1775 and 1787.

In this work Ortes has come very close to Malthusianism, his doctrine being practically identical with that of the English curate. But we find some curious as well as erron-

¹ Bk. ii, chaps. iii-viii. See also Kendall's translation.

eous statements, which lessen the value of the work as a whole. He claimed, for example, that no people was richer, that is, could command more of the means of subsistence, *per capita* than any other; appearances to the contrary were simply evidences of unequal or different distribution. He wrote also that a million inhabitants to every five thousand square miles was about the right proportion; but this he said, apparently at least, without taking into consideration various differences in situation, fertility, *etc.* His general argument, however, is inconsistent with this statement. He believed that foreign trade did not contribute materially to the means of living.

The substance or means of a people could and would increase as the people did, if everything was considered; that is, if the importance of prudence were recognized and mechanical and other improvements (as in agriculture) were not neglected. But it could not be disputed that population was regulated by the amount of subsistence obtainable; a country could not feel permanently secure unless it produced the nourishment needed for its own people.

Ortes, like many other writers regarded the increase of population as tending to assume a geometrical ratio.¹ Ortes

¹ His ratio ran as follows, beginning with seven persons:

<i>Year.</i>	<i>Persons Living.</i>
0.....	7
30.....	14
60.....	28
90.....	56
120.....	112
150.....	224
300.....	7,168
450.....	229,376
600.....	7,340,932
750.....	234,881,024
900.....	7,516,192,768

See *S. C. I.*, vol. xxxiv, chap. i, p. 26.

was of course forced, by the logic of such a progression, to see that checks of various kinds entered into the problem. The check to the increase of animals was lack of food, and the like;¹ man's multiplication was restricted by his own action, by prudence, (*ragione*).² The celibacy of the church was thus not only a beneficial example to the masses, but celibacy whether religious or secular or vicious was the only practicable refuge for considerable portions of a population that had approached the limits determined by the individual's and state's possessions (*sostance*).

Population, said Ortes, tends to increase with national liberty and the security of property.³ When a sovereign imposes too heavy taxes and when wealth is concentrated in the hands of a few, the remainder being in a state of miserable poverty, numbers will not increase, or, if they do, they will ordinarily increase very slowly and with added misery. The luxury of the few, accompanied by poverty among the masses, is always detrimental. Forced labor or servitude or slavery and all forms of oppression check increase, because the conditions of gaining what one needs are exceedingly severe, and the spur to energy and enterprise furnished by ambition is lacking. Marriage, and consequently fecundity, is discouraged, and vice is given its opportunity.⁴

Ortes held then, that population had a tendency to increase at a geometrical ratio; increase in the goods on which man depended was slower, hence the conflict between man and nature; man as a rational animal had learned to regulate increase by reason according to times and seasons. His con-

¹ "Generazioni negli animali limitate de forza." *Ibid.*, chap. ii.

² "Generazioni negli uomini limitate de ragione." *Ibid.*, chap. iii; see also chap. iv.

³ *Ibid.*, chap. xiv.

⁴ *Ibid.*, chaps. xv, xvi.

clusion is the same as that of Malthus: in populous countries the majority must practice prudence or suffer. The state on its side should do what it could to relieve this suffering, and should do away with obvious abuses and unnecessary burdens.

The last Italian writer on population in this period was a contemporary of Malthus, Francesco Mengotti (1749-1830). In his *Il Colbertismo*, a discussion of the mercantile policies, Mengotti comes to the conclusion that it is the soil which furnishes man's subsistence, and it is therefore of prime importance in its connection with population.¹ The amount of subsistence will vary according to the epoch and such circumstances as the degree of civilization and culture. When the mass of annual productions is great and increasing, when industry is stable, when the country is at peace, when, in fine, the wealth and well-being of all in the country is increasing, marriages will become more frequent and the excess of births over deaths will be greater; and with this increase of population it will be seen that national power and wealth also increase. Populousness is therefore to be desired, and those things which hinder increase or welfare should be removed.

Consumption and production should be made to balance as nearly as possible; for excess and want are equally harmful. The true riches of a country consist not in silver and gold; these are the effects of riches, which is a great plenty of products continually replaced. A free competition is

¹ "La misura delle sussistenze degli uomini varia secondo l'epoche e i periodi differente della società. I popoli cacciatori e semibarbari consumano meno dei popoli pastori e questi meno ancora degli agricoltori e manifattori. I bisogni di abitudine, non men prepotente di quelli della natura, vanno crescendo a grado a grado secondo che la maggior coltura e l'industria perfezionata affronto un più gran numero di oggetti ai nostri comodi e piaceri," etc. P. 306.

necessary in order to establish harmony between classes. Agriculture and all productive labor should be encouraged; for the sustenance they produce is the source of population, and on it depend the riches, force and independence of the state. Favoritism in industry and commerce should be abolished, and libertinage should be discouraged in every possible way.¹

§ 6. *English Writers from Adam Smith to Chalmers.* Adam Smith (1723-1790) did not accord any consecutive treatment to the subject of population, nor is it possible to piece together a full and systematic exposition from the cursory remarks on the subject in the *Wealth of Nations* (1776).²

In his chapter on the "Wages of Labor"³ he discussed the question more fully than elsewhere. It is the produce of labor which constitutes the natural recompense or wages of labor, and hence it is through this that laborers obtain the means of subsistence. The bettering of conditions of the lower classes of laborers is to be desired, as they constitute the greater part of every political society, and the nation's welfare consequently depends on their well-being.

"Poverty," said Smith,

though it no doubt discourages, does not always prevent marriage. It seems even to be favorable to generation. A half-starved Highland woman frequently bears more than twenty children, while the pampered fine lady is often incapable of bearing any, and is generally exhausted by two or three.

¹ Pp. 349-350.

² Cf. Wagner, *op. cit.*, p. 452: "A. Smith hat die Bevölkerungsfrage nur gelegentlich gestreift, aber noch keine principielle Stellung zu ihr eingenommen. Reichtum und äusserste Armut halt er für gleich ungünstig."

³ Bk. i, chap. viii.

Barrenness, so frequent among women of fashion, is very rare among those of inferior station. Luxury in the fair sex, while it inflames perhaps the passion for enjoyment, seems always to weaken and frequently to destroy altogether the powers of generation.

But though poverty according to Smith is not unfavorable to the generation of children, it usually prevents the successful rearing of them. "It is not uncommon," said Smith, "in the Highlands of Scotland for a mother who has borne twenty children not to have two alive." Excessive generation of children among the poor is then counterbalanced by the enormous infant mortality. In some places "one-half the children die before they are four years of age; in many places before they are seven; and in almost all places before they are nine or ten. . . ."

Every species of animals naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it. But in civilized society it is only among the inferior ranks of people that the scantiness of subsistence can set limits to the further multiplication of the human species; and it can do so in no other way than by destroying a great part of the children which their fruitful marriages produce.

High wages tend to increase population, for, besides permitting more marriages, they enable parents to support and rear their offspring so that a larger proportion will live. As long as wages continue to advance, population will increase. If wages are low or diminishing, population suffers and either remains stationary or decreases.

It is in this manner that the demand for men necessarily regulates the production of men, like that of any other commodity; quickens it when it goes on too slowly, and stops it

when it goes on too fast. It is this demand which regulates and determines the state of propagation in all the different countries of the world, in North America, in Europe and in China; which renders it rapidly progressive in the first, slow and gradual in the second and altogether stationary in the last.

The "increase of stock" raises wages while it lowers profits, and as the masses are wage receivers, they are benefited and caused to increase thereby. An increase in wealth and improvements will tend to cause population to increase; but this increase operates so as to lower wages again.¹ In a country which has acquired its "full complement of riches" which natural and industrial conditions allow, population can increase no more, and both the "profits of stock" and wages will be low.

In the second part of his chapter on rent, "considered as the price paid for the use of land,"² Smith states that countries are populous in proportion to the produce which feeds and supports the people. But that produce which simply clothes and lodges men does not affect increase; for life depends primarily on food, and where this is plentiful life increases, and shelter and clothing are obtained with comparative ease,—at least so easily that they have no really important effect.

Some of the other theories in the *Wealth of Nations* have a relation to the welfare and increase of a people. The "division of labor" must operate to increase numbers, for the total volume of production is greater than without it, and population regulates itself according to wages and the necessary products which can be obtained by them.

Adam Smith's statement that the demand for men regulates their production seems to take for granted the various

¹ Bk. i, chap. ix.

² Bk. i, chap. xi.

positive and to some extent the preventive checks of Malthus, and it implies that men as rational beings use prudence, as hard times dictate, in regard to marrying and the number of children they will have. When the most primitive types or the lowest classes do not use such prudential foresight, the story of the Highland woman is repeated.

Arthur Young (1741-1820) emphatically objected to the doctrine that population is the test of national prosperity. In his *Travels in France*,¹ for example, he said that

Of all the subjects of political economy I know not one that has given rise to such a cloud of errors as that of population. It seems, for some centuries, to have been considered as the only sure test of national prosperity. The politicians of those times, and the majority of them in the present, have been of the opinion, that to enumerate the people was the only step necessary to be taken in order to ascertain the degree in which a country was flourishing. In my *Tour through the North of England*, 1769, I entered my *caveat* against such a doctrine and presumed to assert "that no nation is rich or powerful by mere numbers of people; it is the industrious alone that constitute a nation's strength;" that assertion I repeated in my *Political Arithmetic* in 1774. . . . About the same time a genius of superior cast (Sir James Steuart) very much exceeded my weak efforts, and, with a masterly hand, explained the principle of population. Other writers have arisen who have viewed the subject in its right light; and none of these have equalled Mons. Herrenschwandt, who, in his *Economie Politique Moderne*, 1786, has almost exhausted the subject.

France, said Young, afforded a very good example of the disastrous effects of too little subsistence for a

¹ In John Pinkerton's *A General Collection of the Best and Most Interesting Voyages in All Parts of the World*, vol. iv, pp. 428-433.

given population. "Her population is so much beyond the proportion of her industry and labor that she would be more powerful and infinitely more flourishing if she had five or six millions less of inhabitants." This great populousness he attributed particularly to the "division of lands into small properties;" but as the people had about reached the lowest plane on which they could exist and propagate, "the least check to subsistence is attended with great misery." He thought population tended to increase even faster than the demand; his idea here being practically identical with Malthus's ratios and somewhat different from Adam Smith's view that population regulates itself according to the demand for labor.

Statesmen often make two great errors, said Young; *viz.*, encouraging marriage and attracting foreigners. "The predominant evil in this kingdom is the having so great a population that she can neither employ nor feed it; why then encourage marriage? . . . You have so great competition for food that your people are starving or in misery." There is no reason why foreigners should be imported while peasants are starving, thereby simply increasing the severity of the competitive struggle for work and the extent of want. The level of wages "probably" depends on "the proportion there may be between the demand and the hands that supply it; for if many men are wanted, and few to be had, prices will rise."

In *The Farmer's Tour through the East of England* (1771) we find the following statement of his theory:

In spite of the assertions of all political writers for the last twenty years, who place the prosperity of a nation in the greatest possible population, an excessive population without a great amount of work and without abundant productions is a devouring surplus for a state; for this excessive population

does not get the benefits of subsistence which, without this excess, they would partake of; the amount of work is not sufficient for the number of hands; and the price of work is lowered by the great competition of the laborers, from which results indigence to those who cannot find work.¹

Young's theories regarding population and wages and general welfare are then in the form of arguments against the irrational desire for increase without adequate care for the employment of all. In general his views may be said to be like those of Malthus, who found Young's works a great source of information in developing and proving his "principle."

*A Journey through Spain in the Years 1786 and 1787*² by the Reverend Joseph Townsend (1739-1816) was published in 1791. His statement of his views concerning the dependence of population on subsistence contains a common modern argument against the practicability of communism:

Their numbers must be limited because their food is so; and were they to establish a community of goods, they must either cast lots who should emigrate, or they must all starve together; unless they chose rather to agree that two only in every family should marry, and when a cottage became vacant could find means to settle which of the expectants should unite to take possession of it.³

In his *Dissertation on the Poor Laws* (1787) Townsend

¹ *Ibid.*, p. 429.

² "*And Remarks on Passing Through a Part of France*," in three volumes. See vol. i, p. 383, *et passim*.

³ Townsend was here discussing the problems of a Spanish village; and he remarked in this connection that, as the case of a small community is more easily comprehended, this "may assist us in pursuing our researches on the extent of population where its combinations are not quite so obvious."

indicated the peculiar strength of the procreating tendency, among the lower classes in particular, and the impossibility of successfully combatting poverty by supporting the poor through the prevalent system of aids and reliefs. This only made poverty more endurable and continuous, and caused the poorest to increase without adequate provision for their employment and sustenance; so matters became worse. Subsistence does not tend to increase as fast as population, and is in fact unable to do so; therefore we shall always have the poor with us. This is a condition we must face; poor relief does not remedy the evil, it aggravates and increases it. His arguments indicate the source of some of Malthus's ideas.

Perhaps the most systematic treatment of our subject among the English writers of this period is found in the *Principles of Moral and Political Philosophy* (1785) by Doctor William Paley (1743-1805). He believed that the decay of population is the greatest evil that a state can suffer; and the improvement of it the object which ought, in all countries, to be aimed at in preference to every other political purpose whatsoever.¹ Paley devoted the rest of his chapter on population to an explanation of the causes of the growth and the decrease of numbers. The following excerpt practically summarizes all his views on the matter:

In the fecundity of the human, as of every other species of animals, nature has provided for an indefinite multiplication. Mankind have increased to their present number from a single pair; the offspring of early marriages, in the ordinary course of procreation, do more than replace the parents: in countries, and under circumstances, very favorable to subsistence, the population has been doubled in the space of twenty years; the havoc occasioned by wars, earthquakes, famine or pestilence is

¹ For whole discussion, see bk. vi, chap. xi.

usually repaired in a short time. These indications sufficiently demonstrate the tendency of nature, in the human species, to a continual increase of its numbers. It becomes therefore a question which may reasonably be propounded, what are the causes which confine or check the natural progress of this multiplication? And the answer which first presents itself to the thoughts of the inquirer is, that the population of a country must stop when the country can maintain no more, that is when the inhabitants are already so numerous as to exhaust all the provision which the soil can be made to produce. This however, though an insuperable bar, will seldom be found to be that which actually checks the progress of population in any country of the world; because the number of the people have seldom, in any country, arrived at this limit or even approached to it. The fertility of the ground in temperate regions is capable of being improved by cultivation to an extent which is unknown.

Paley, then, admitted that population depends on food and that it is limited by the amount produced, as a matter of fact, while it is not necessarily limited except by the amount of subsistence producible. The amount that can be produced is capable of almost indefinite expansion, and it must therefore be admitted that the possible increase is indefinite. He adds:

Wherever the commerce between the sexes is regulated by marriage, and provision for that mode of subsistence to which each class of the community is accustomed can be secured with ease and certainty, there the number of people will increase; and the rapidity, as well as the extent, of the increase will be proportioned to the degree in which these causes exist.

The standard of living, the conditions of industry, the kind of distribution of wealth, all have important effects on

population, as reflection will partially reveal. Emigration is either the sign of over-population or greater inducements elsewhere. Colonization is a step taken to prevent any bad effect on the mother country.

Two works which gave rise to a considerable discussion at this time were *An Essay on the Population of England and Wales* and *The Observations on Reversionary Payments* (1780) by Doctor Richard Price (1723-1791). The last work has particular reference to insurance, but the mathematical basis of the work furnishes a foundation for a theory of increase. The author maintained that population would increase until it was checked by moral or physical circumstances; when it had reached this limit it would tend to remain stationary on account of a more general practice of celibacy, greater infertility and a greater mortality. Causes tending to check the growth of population in ordinary times were: (1) the increase of the army and navy, which necessitated a continually new supply of men; (2) a devouring capital city, too large in proportion to the country; (3) wars; (4) emigrations and colonies; (5) the engrossing of farms; (6) the high price of provisions; (7) the increase in the consumption of liquors and luxuries; and (8) the increasing of taxes and public debts.

The increase of population, said Doctor Price, depends on healthfulness, which is the cause of fecundity. Country life is much more healthful than city life, hence the greater birth-rate in rural parts of the country. The remarkably rapid rate of increase in the American colonies, which had seldom been paralleled, he attributed to the more healthful manner of living, as well as to the greater ease with which necessities of life were obtainable.

"The state in which mankind increase the most is that in which they lead simple lives, are most on an equality, and

least acquainted with artificial wants. Luxury in society renders it rank." ¹

Price's works were not a great contribution to the subject; he accepted the more advanced conclusions of his time, but in his endeavors to be exact he was often misled into a pseudo-accuracy by a too confident reliance on his mathematical formulæ.

Doctor Price's *Essay* was as productive of opposition as was the *Discourse* of Hume thirty years before. The works of Howlett, Wales and Chalmers are all more or less closely related to it. *An Examination of Doctor Price's Essay on the Population of England and Wales* (1781) by the Reverend John Howlett (1731-1800), though accepting the fundamental theories of Price, and others holding the same general views, objects to his conclusions. Price like Wallace thought that population had decreased since former times, and he based his view on somewhat similar grounds; but Howlett maintained that cities with their commerce and industry act as incentives to greater productivity of agriculture; they need and use the surplus created by agriculture. Because of the increased demand for his produce

the farmer would have double the incentive to cultivate and improve his grounds; his products in corn and cattle would every day increase; the tradesman, the manufacturer, the mechanic would share in the general advantage; great additional numbers, in the meantime, would be constantly employed in carrying the fruits and riches of the country to the newly augmented metropolis.²

¹See p. 31, *et passim*, of *An Essay on the Population of England and Wales*; also *Reversionary Payments*, *passim*; also *Observations on the Expectations of Lives, the Increase of Mankind, etc.*, a letter from Price to Benjamin Franklin, in the *Philosophical Transactions* for 1769, pp. 89-125.

²P. 6.

Howlett admitted, however, that great towns, considered in themselves and without relation to their influence on the surrounding territory, were prejudicial to increase. The air is usually less salubrious than in the country; men are more strongly incited to irregular conduct, to luxury, to intemperance and vice. All these conditions obstruct marriage and tend to shorten the lives of individuals. But he rejected Price's view that

great towns do more towards the obstructing the increase of mankind than all the plagues, famines and wars. I have often thought with pity and surprize of the zeal with which Sir William Petty and Mr. Maitland contended, in opposition to some French writers, for the superiority of London to Paris, or any other city in the world. They did not consider that they were only maintaining that England had a greater evil in it than any other kingdom.¹

As already explained, Howlett thought that the social evils of cities affecting the birth and death rates disadvantageously to increase were more than counterbalanced by the favorable effect on the whole country of urban industries and commerce.²

William Wales (died 1798) enters the discussion in his *Inquiry concerning the Present State of the Population of England and Wales* (1781). This work does not contain much that is of value so far as this study is concerned; like Price's work it is a study in "political arithmetic," and its main interest lies in the comparison of birth and death rates, but it contributes nothing new in regard to general

¹ Howlett's *Examination*, pp. 8-9; Price's *Observations* (*Appendix*), p. 63.

² Cf. also Howlett's *Inquiry into the Influence which Enclosures have upon the Population of England*, 1786, in which the author defended enclosures from the viewpoint of population.

phases of the question. Wales suggested a more equitable taxation, so that marriage and increase might be encouraged.¹

The following paragraphs, taken from *An Estimate of the Strength of Great Britain during the Present and Four Preceding Reigns* (1794), indicate that George Chalmers was abreast of the most advanced thought on population in his time:

The Lord Chief Justice Hale formerly and Sir James Steuart and the Count de Buffon lately considered men as urged, like other animals, by natural instincts; as directed, like them, by the same motives of propagation; and as subsisted afterwards, or destroyed, by similar means.

It is instinct then which, according to those illustrious authors, is the cause of procreation; but it is food that keeps the population full and accumulates numbers, whether of the fish of the sea, the fowls of the air or beasts of the field, which are yearly produced: we perceive however the essential consequence of the last, from the vast numbers that annually perish for want.

Experience indeed evinces to what an immense extent domestic animals may be multiplied, by providing abundance of food. In the same manner mankind have been found to exist and increase in every condition and in every age according to the standard of their subsistence and the measure of their comforts.²

Chalmers agreed with Hume "that it seems reasonable to expect that where there are the wisest institutions and the most happiness there will also be the most people." He endeavored to adduce historical proof in support of this statement, by examining the various epochs of English

¹ See p. 13 especially.

² Pp. 1-2.

history and the famines and other misfortunes occurring in them.

Like most writers in the last half of the eighteenth century Chalmers may be regarded as a precursor of Malthus. The main differences in the opinions and theories of this time seem to consist in the mathematical expressions of some and the absence of such expressions in others; and writers varied somewhat in their conclusions as to the dangers of over-population. In general it may be said that this was not feared if the governmental regulations were of a beneficent character. Human prudence would act as a restraint; really superfluous numbers were to be thought of only in the vague future.¹

¹ The theories of Godwin and his relations with Malthus have been quite fully treated by several writers and in encyclopædias and dictionaries, so that the present writer has deemed it unnecessary to include a discussion of them in this study.

CONCLUSION.

The Greek ideal was favorable to a good population rather than to a numerous one, though in order to keep up numbers, especially after wars, stringent laws, whose purpose was to encourage marriage and increase fecundity, were enacted. In general the aim of Greek institutions may be said to have been to permit only the fit to survive as citizens. Fertility among married women was of course desired, and attention to the physical capacities of parents was considered advisable. Plato and Aristotle emphasized proportion and quality in population. The attitude of the later philosophic schools was one which regarded marriage and family cares as necessary evils for the majority.

The Roman political attitude was unquestionably favorable to increase; but in the later years of the Republic and in the early Empire in particular, private morals and policy were unfavorable to fecundity, hence the various laws to regulate the marital and moral relations of the sexes and the rewards for fecundity and the favors to *patres familiarum*, as opposed to celibates.

Primitive men had but vague conceptions of the problem, —their acts were mainly instinctive,—and in their superstitions or religions we find little that points to phallism. In more cultured stages certain forms of phallic worship developed, and a veneration of the reproductive power in man as in nature generally appeared. In the great religions of antiquity we see systematized regulations of this natural tendency; but in some cases, usually only in the priesthood

and among philosophers, forms of celibacy and asceticism were advocated and practised. This was evidently the ancient manner of laying stress on spiritual and intellectual growth, which was hindered by the too great licentiousness of the many.

With the introduction of Christianity, as a moral and religious force, came an almost violent revolt against current ideals. Population as such was regarded as of but small importance; the aim was the moral and spiritual improvement of the living and the saving of the dying; the purpose was primarily celestial, and mundane only in so far as the present life was a preparation for the future. The existing laxity of morals seems to have been the fundamental cause of the growth of early ascetic tendencies, beginning with Saint Paul and continuing down the ages in the practices and doctrines of the Catholic Church. We find that marriage and the perpetuation of the race were often regarded as inevitable evils; and marriage was often referred to as impure or at least as inferior to a state of chaste celibacy. This was the general doctrine, whatever the practice may have been.

In the humanistic writings we find a reversion to Greek ideals, but with modifications indicating the influence of Christianity; and in the German Reformation we see a reaction against what were considered the untenable—because resulting in immorality—doctrines of the Roman Catholic Church. It was not only maintained that marriage was desirable in practically every instance, but that it and the begetting of children were the divinely approved modes of living. With this reaction there was undoubtedly a falling away from much of the prudence advocated by the Church, whatever the total effect may have been.

The publicists of the early modern period were divided in their opinions concerning the desirability of great popu-

lousness, especially in cities; some, who were influenced by classical literature as well as by conditions at the time or not long before, expressed fears of over-population. This was true particularly in the England of the end of the sixteenth and the beginning of the seventeenth century.

But from about the time of the Restoration in England, and from the days of Colbert (but also before, as in Bodin's *Commonwealth*) in France, and from the Peace of Westphalia in Germany, and concurrently in most other countries, with the growing dominance of mercantilist influence and the increasing rivalry among the nations for political pre-eminence,—the doctrine that a great and increasing population is always desirable became universally accepted. Populousness, national wealth and popular welfare were regarded as interdependent.

Toward the end of the seventeenth and to the middle of the eighteenth century more rationally developed theories found acceptance, not as replacing but as supplementing the ordinary mercantilist, nationalist doctrine. Great populations were still desired, but with the reservation that the people be comfortable, employed and healthy. Some ideas of the limitations to increase by the amount of means of subsistence obtainable were expressed;—governments should seek to develop commerce first and agriculture secondly, so that the masses could find employment and thereby be enabled to increase effectually and without an unnecessary increase of misery or a too great increase of pauperism.

From about the middle of the eighteenth century to the time of Malthus, the modern, so-called "Malthusian," doctrine, that population tends to increase more rapidly than the food supply, found almost universal acceptance;—among French writers, by Montesquieu, Brückner and others, besides the Physiocrats and political and philosophical writers

generally; in England and America in the works of Franklin, Hume, Wallace, Steuart, Smith, Paley, Chalmers and others; in Germany in the discussions of Möser, Schloezer and Herrenschwand, especially; and among Italian writers quite generally.

That part of the theory which maintains that population tends to increase at a geometrical ratio, while the means of subsistence tend to increase more slowly was announced in the works of Graunt, Petty, Saxe, Brückner, Mann, Suessmilch, Ortes and several others. This part of the theory owes its origin mainly to the comparative study of birth rates and mortality tables of various cities on the continent as well as of London. Positive and preventive checks to increase were acknowledged by most writers; but it was often believed that many of these hindrances to increase could be removed by wise and benevolent governmental regulations.

The theories of the last fifty years before Malthus are frequently parts of protests against governmental abuses and the special privileges and wanton luxury of the rich and the nobility, with a disregard of the interests and welfare of the many, the peasants. A more equitable distribution of wealth as well as more intelligent and better methods of administration of fiscal burdens were desired. This would relieve the poor and encourage increase; edicts and laws which did not take the economic well-being of the people into account could never effect an increase.

It would entail a somewhat extended discussion of Post-Malthusian theories to summarize critically even a part of the omissions of earlier writers. Suffice it then to say that the modern, more scientific treatment of the subject was not possible, though some of the rudiments were suggested from the psychological as well as from the biological and socio-economic standpoint. New biological theories and discoveries and the growing appreciation of the varying

and perhaps uncertain characteristics of man have naturally led to discussions of a somewhat more satisfactory and certainly of a less incomplete sort; and industrial changes have suggested the importance of phases of the problem before unthought of. The problems of race, the "*Rassenkampf*," have also attracted some attention with the growth of more recent sociological, anthropological and ethnological studies. These considerations indicate in a measure also the force of the writer's contention that the problems of population as well as the doctrines relating to them, vary, and must be understood largely in the light of existing circumstances; and enable us to say, as Malthus said in his time, that "much remains yet to be done."

Even writers who have given the history of doctrines of population only a cursory study have concluded that there was no real contribution to the problem in Malthus's *Essay*; but Malthus himself modestly recognized this. He was, however, not satisfied with the statements of conclusions in the few works of his predecessors with which he was acquainted, and he thought that his work was a better and more systematic presentation of the subject than the world yet possessed, especially in the proposition that population tends to increase at a geometrical, and the means of subsistence at an arithmetical ratio;—which however does not give us as valuable information as he supposed. Malthus's terminology of "positive" and "preventive" checks does not in reality mean more than the simpler explanations of several earlier writers.

Among the circumstances which contributed to making Malthus's work notable was the attention given to Godwin's *Political Justice*, a work not unlike Condorcet's *Esquisse*. Malthus's *Essay* was in part a reply to Godwin's work, and the importance of the question at the time, connected in a way as it was with the Parliamentary debates, drew the

attention not only of scholars but of politicians to this controversy and the doctrine as put forth by Malthus, who displayed more skill than his predecessors in showing the relation of population to general economic doctrines and problems.

Malthus's work was a great one, written in an opportune time, and though it cannot lay claim to any considerable originality as far as the theories presented are concerned, it was successful in that it showed more fully, perhaps more clearly, and certainly more effectively than had any previous attempt, that population depends on subsistence and that its increase is checked by want, vice and disease as well as by moral restraint or prudence.

VITA

The author, Charles Emil Stangeland, was born in Sheldahl, Iowa, 1 May, 1881. He received his early training in the public schools of Sioux Rapids and Mason City, Iowa, and in an academy at Jewell, Iowa. He received the degree of A. B. in 1898 after completing the Greek course at Augsburg Seminary, Minneapolis. He attended the following institutions as a graduate student: the University of Wisconsin, 1898-1899; the University of Minnesota, 1900-1902; the University of Berlin, 1902-1903; Columbia University, 1903-1904.

The degree of A. M. was granted him by the University of Minnesota in 1901; in 1902 he received the State University Teacher's Certificate from the same university. During the year 1902-1903 he held a traveling fellowship (the Class of '90 Fellowship of the University of Minnesota); and during the year 1903-1904 he was University Fellow in Economics of Columbia University.

At the University of Wisconsin the author was admitted to Professor R. T. Ely's Economic Seminary; at the University of Minnesota he was for two years a member of Professor W. W. Folwell's Political Science Seminar; at the University of Berlin he was an active member of Professor Max Sering's *Uebungen für Vorgebildete im staatswissenschaftlich-statistischen Seminar, mit Ausflügen*, for two semesters, in which he presented a study intended (and informally accepted) as a doctor's dissertation, entitled *Die volkswirtschaftliche und sociale Bedeutung der Einwanderung*

für die Vereinigte Staaten, mit besonderer Berücksichtigung der neueren Veränderungen. While a student at Berlin the author was also, during one semester, a member of Professor Adolph Wagner's *Nationalökonomische und finanzwissenschaftliche Uebungen im staatswissenschaftlichen Seminar, besonders aus dem Gebiete der Steuer-, Zoll-, und Handelspolitik* and of Professor Felix von Luschan's *Anthropologisches Colloquium*. At Columbia University he attended the Seminar in Political Economy and Finance, conducted alternately by Professors E. R. A. Seligman and J. B. Clark.

The author has attended lecture courses under the following gentlemen: at the University of Wisconsin, Professors Ely, Meyer, Scott and Haskins; at the University of Minnesota, Professors Folwell, West, Smith, Clark and Kiehle; at the University of Berlin, Professors Wagner, Schmoller, v. Halle, Bortkiewicz, Delbrück, Gierke, v. Martitz, Kübler, Paulsen, Dilthey, Pfleiderer, Liszt and v. Luschan; at Columbia University, Professors Seligman, Clark, Giddings, Seager, Moore, Burgess and Goodnow.

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